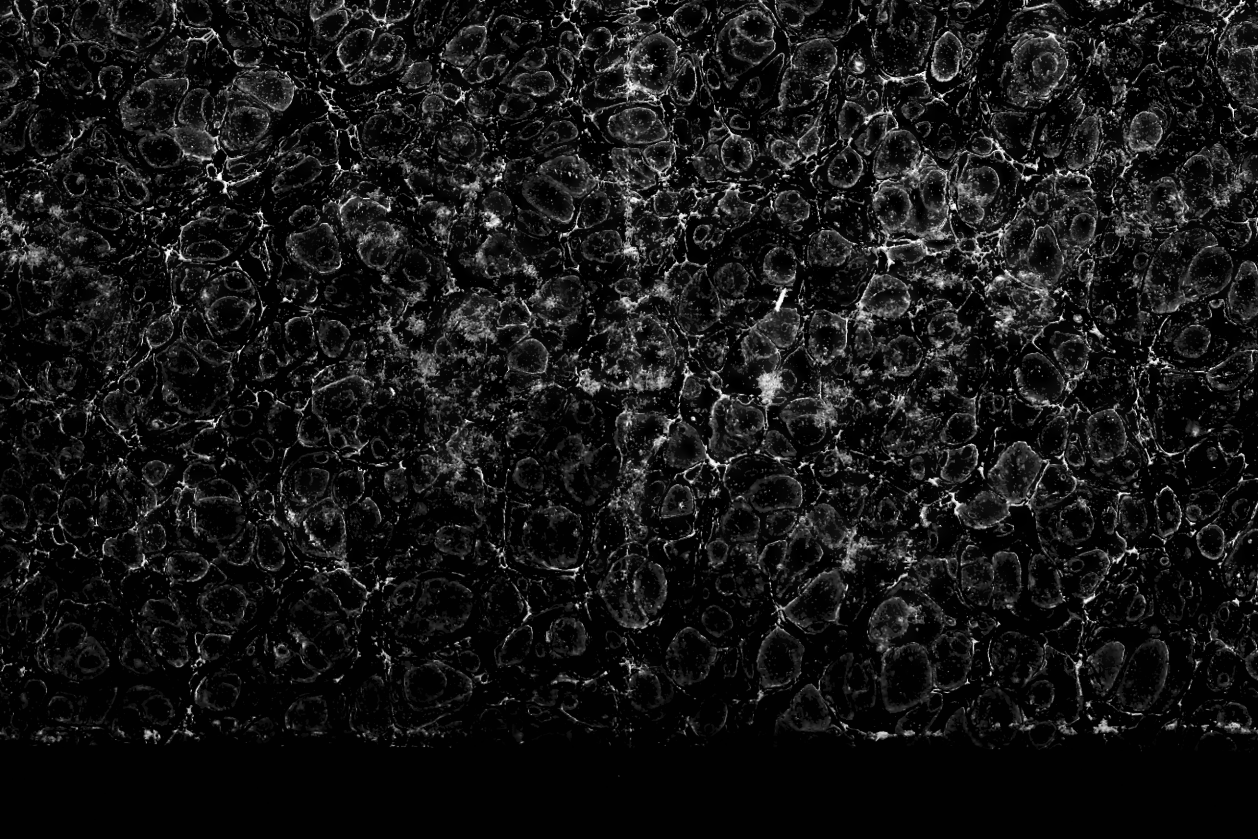

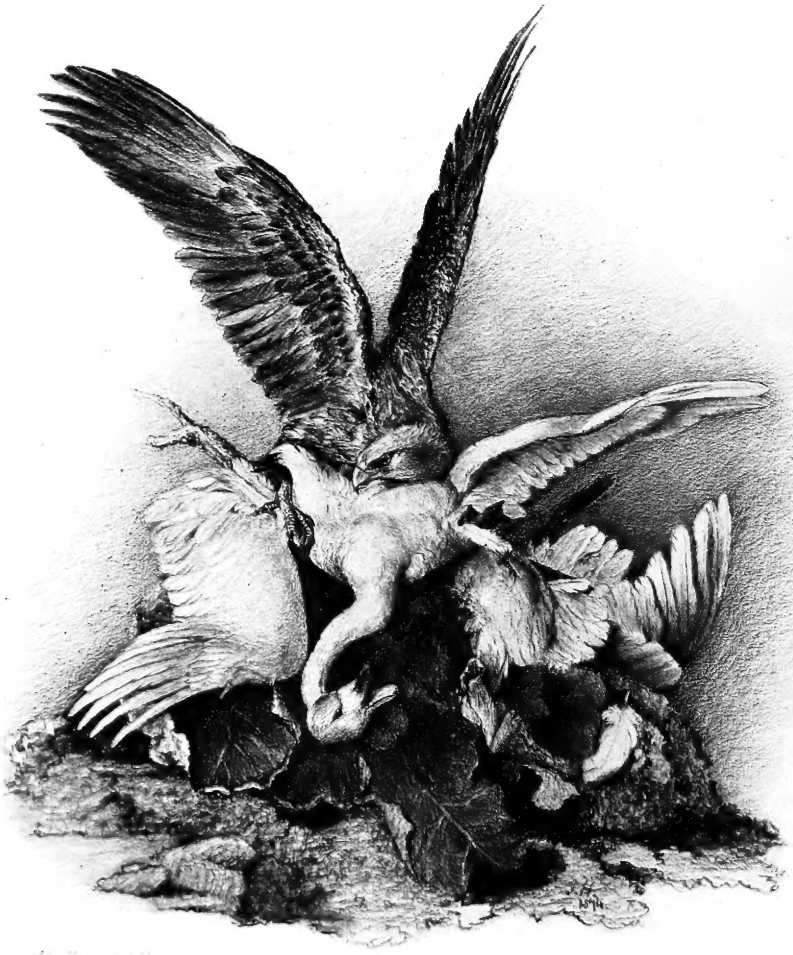

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BEWICK'S SWAN attacked by WHITE-TAILED EAGLE.

Nat. Hist. Trans. N.S. D'Urban

NATURAL HISTORY TRANSACTIONS

OF

NORTHUMBERLAND AND DURHAM;

BEING PAPERS READ AT THE

MEETINGS OF THE NATURAL HISTORY SOCIETY

OF

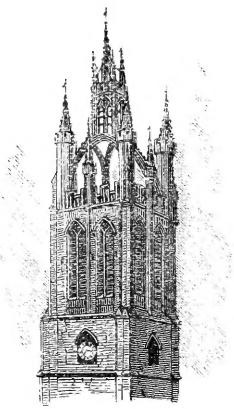
NORTHUMBERLAND, DURHAM, AND NEWCASTLE-UPON-TYNE,

AND THE

TYNESIDE NATURALISTS' FIELD CLUB,

1873.

VOL. VI.



LONDON:

WILLIAMS & NORGATE, 14, HENRIETTA STREET, COVENT GARDEN;
AND 20, SOUTH FREDERICK STREET, EDINBURGH.

NEWCASTLE-ON-TYNE: F. & W. DODSWORTH.

1874.

NEWCASTLE-UPON-TYNE: PRINTED BY JOHN BELL AND CO., RAILWAY BANK.

A CATALOGUE

OF

THE BIRDS

OF

NORTHUMBERLAND AND DURHAM.

BY JOHN HANCOCK.

WITH FOURTEEN PHOTOGRAPHIC COPPER-PLATES, FROM

DRAWINGS BY THE AUTHOR.

INTRODUCTION.

In the "Transactions of the Natural History Society of Northumberland, Durham, and Newcastle-upon-Tyne," the late Prideaux John Selby, Esq., of Twizell, published a catalogue of the birds of the two Northern Counties: this appeared in 1831. Up to that time no list, of any authority, of the birds of this district, had been published.

Wallis, indeed, in his "Natural History and Antiquities of Northumberland," published in 1769, had given a very imperfect list of the birds of that county, in which fifty species are enumerated. This author states that he "might name other migratory *Fissipedes*, as the Woodcock, etc., but as they are common I pass on to the *Palmipedes*." It is therefore evident that his object was to record only the rarer or more remarkable species.

No other list was made for nearly half a century, when in the History of Hartlepool, by Sir Cuthbert Sharp, published in 1816, there appeared a "List of birds observed at Hartlepool." This list contains sixty-eight species.

A more important and extensive catalogue of the birds "frequenting the country near Stockton" appeared in 1827. This was drawn up by the late John Hogg, Esq., of Norton, and published in his "Natural History of the Vicinity of Stockton." It also appeared as an appendix to Brewster's history of that town; and, although prepared with considerable care, is very incomplete. It includes one hundred and twenty-six species, but nothing of remarkable interest, with the exception of the Golden Eagle. This name, however, is evidently a mistake, as the measurements which are given prove it to have been, without doubt, the White-tailed or Sea-Eagle.

Mr. Selby's catalogue includes all the birds of the two counties that were known up to the time of its publication, and was a step far in advance of what had previously been done. But since its publication upwards of forty years have elapsed, and during that period a considerable number of species have been added to the list; and the information as to the avifauna of the district has in every way been greatly advanced. Such additional matter might perhaps have been given as an addendum, or as it were in continuation of this catalogue; but to have done so would not have been satisfactory.

The readiest and simplest plan for me appears to be to draw up an entirely new catalogue, incorporating with it every thing of importance mentioned in the labours of my predecessors.

For many years past I have kept a journal in which is carefully registered the occurrence of all rare and remarkable birds in the two Northern Counties, and all other matters of interest respecting the avifauna of the district. This journal will form the basis of the catalogue; and I have also availed myself of the assistance of my brother ornithologists of the neighbourhood, to whom my best thanks are due, for the cordial coöperation they, one and all, have afforded. My acknowledgments of such assistance will be more particularly made, under the heading of each species, in the body of the catalogue.

In Mr. Selby's catalogue two hundred and fourteen species are recorded: this new catalogue contains about two hundred and sixty-five, thus adding more than fifty to the former. The total number of species of British birds is, according to the latest authorities, about three hundred and ninety-five, being only one hundred and thirty more than have occurred in the counties of Northumberland and Durham; so that our list now contains about two-thirds of the whole number of the British species.

The ornithic richness of the district does not fall far short of that of Norfolk, a county of which the ornithology has been well worked out for many years, and in which the avifauna is very extensive. Mr. Henry Stevenson states, in a note in the first volume, page 14, of his work on "the Birds of Norfolk," that there are two hundred and ninety-one species in that county;

but of these a few are included on what appear to be insufficient grounds: the number may therefore be put down at two hundred and eighty, making at present a few more than are recorded in our district, an area of not much greater extent than that embraced by Mr. Stevenson's list.

The great numerical extent of our catalogue is to be accounted for by the diversity in the physical features of the district, which are well suited to the habits of many tribes of the feathered race. Our extensive seaboard lies in the direct line of the annual migrations to and from the northern latitudes, and is well fitted to the requirements of many species of sea fowl. The coast in many parts is bold and rocky, but is agreeably varied with beautiful sandy beaches of vast extent, backed with wild hummocky "links," and not unfrequently with belts of bog and pools of sedgy water. There is also no want of muddy flats or estuaries, though these features are fast disappearing under the necessities of commerce.

The northern and western portions of the counties are wild and hilly. The Cheviot range attains an elevation of two thousand six hundred and fifty-eight feet, and this, along with that of Simonside, gives quite a sub-alpine character to this portion of the country. In these uplands the Eagle and Peregrine Falcon formerly had their abode. The latter reared its young there until within the last twenty or thirty years. For many years it nested regularly on Thrunton Crags, near Whittingham. I saw this eyry in 1835. The parents had that year been destroyed, and I believe it has not bred there since. The western part of Durham is also wild, moory, and mountainous, but of less elevation. These wild regions are characterized by vast tracts of grass land, in some places fine, in others coarse, boggy, and hummocky; and by extensive moors of heath, gorse, and bracken, with swamps, mosses, tarns, and lochs, the resort of the Duck, the Lesser Black-backed Gull, the beautiful Black-headed Gull, the Lapwing, the Curlew, the Plover and Snipe, the Blackcock and Grouse. Numerous lively streams in pebbly beds, and whimpering rills, diversified with little lippering cascades, abound; some almost concealed under the scrubby foliage of their banks;

others fully revealed and sparkling over their stony channels. In such places the Sandpiper lays its four beautiful eggs; and the Dipper and Ring Ouzel rear their broods. Cliffs also abound, riven and shattered by ages of elemental strife. And here the Raven, in former times, had its abode; and still, by its name, gives a certain weird picturesqueness to some of its former haunts, as for instance Raven's Crag, on the ridge of Simonside and Raven's Cleugh, near Ottercaps.

The cultivated regions are in some places well wooded, and the fields are mostly divided by thorn hedgerows, giving at once beauty to the landscape, and shelter to the more delicate tribes of the *Passeres*. But such, particularly the warblers, find their haunts in our numerous wooded dells or "denes" which abound in both counties, and by the shrubby banks of our burns or streamlets. Here the hawthorn, the black thorn, the wild rose, and bramble, and undergrowths of all kinds, afford to these delicate songsters the shelter and seclusion they require. These "denes," of which Castle Eden Dene is a fine example, are frequently well timbered, deep, and have a stream running through them. The principal rivers, the Tyne, the Coquet, and the Wear, not to mention the bordering streams, the Tweed and the Tees, run through deep wide valleys, with, in many parts, well wooded banks, affording, likewise, favourite homes for various feathered tribes. Besides such localities, there is no want of extensive woods dispersed throughout the counties, and well wooded park grounds, where accommodation can be found for such birds as the Pies, the Jays, the Pigeons, the Thrushes, etc., and the smaller Hawks and Owls. But, alas! most of these resident species have no resting place, for they are every where ruthlessly shot down by the game-preserver, who, having designated them "vermin," gives them no quarter.

Besides the favourable character of the physical features of the two counties, the district is well situated as regards the spring and autumn migrations to and from the north of Europe as already pointed out; and the proximity of the numerous breeding stations of marine birds on the west of Scotland, and also of the mountainous regions and wild moorlands of the lake districts of

Westmoreland and Cumberland, must likewise tend to increase the number of visitants. The coast is visited every autumn by great numbers of migrants, such as the Short-Eared Owl, the Woodcock, the Snow Bunting, the Mountain Finch, the Fieldfare, and the Redwing. And the Dotterel is seen every year on its way to and from its breeding places in Westmoreland and Cumberland.

Two or three localities require special mention on account of their ornithological features. The first of these is the Farne Islands, a cluster of about fifteen small rocky islets and pinnacles composed chiefly of basalt, lying off the Northumberland coast, near its northern extremity; the largest and nearest of which is about two miles from the shore, the most distant about five. In this limited area fifteen species of sea fowl breed, namely, the Ring Dotterel, Oyster Catcher, Lesser Black-backed Gull, Herring Gull, Kittiwake Gull, Sandwich Tern, Common Tern, Arctic Tern, Roseate Tern, Cormorant, Shag, Eider Duck, Guillemot, Puffin, and Razorbill.

This breeding station is remarkable rather for the number of the species located there than for the multitude of individuals, which in some other stations is prodigious, as may be witnessed on the West of Scotland, or even at Flamborough Head, where the Gulls, Guillemots, and Razorbills abound to a much greater extent than do any of the species at the Farnes, though the Terns and Lesser Black-backed Gulls are in considerable numbers. The eggs of the former are very numerous, and are so crowded together that much care is required to avoid treading upon them as one walks over their breeding ground, which is chiefly confined to one of the low grassy islets. The Guillemots have possession of the pinnacles, three basaltic columns of no great size, and about forty feet high. The eggs are deposited on the tops of these isolated columns, and can only be reached by climbing. There used to be a rope suspended from the top of one of the columns, and with the aid of this rope, and with one foot against one column, and the other foot against the adjacent one, an active climber might haul himself to the top. When I visited the locality in June, 1831, in company with Mr. W. C. Hewitson

and my brother Albany, our supply of these eggs was obtained in this manner; Mr. Hewitson, who was a bold and active climber, disdaining the rope, bravely ascended the pinnacles and lowered down to us in the boat at their base, the eggs, in his hat. The Kittiwake, which, though plentiful, is in no great abundance, avails itself of the inequalities of the precipitous faces of the pinnacles and of the neighbouring cliff to build its nest. The Lesser Black-backed Gull is numerous and is not confined to any particular islet. Only a few pairs of Puffins were breeding at that time; they are now however much more numerous, as I was informed by the late Mr. Joseph Watson, Junr., and Mr. Isaac Clark, who visited the islands in 1870. The eggs of this species are placed at arms length within rabbit holes on one of the hummocky grassy islets.

The Cormorants had possession of a rocky islet of little elevation: here, their nests, which are composed of sea-weed, are associated together, these birds forming a small colony by themselves. As we approached, the Cormorants went off in a body to an adjacent rock at no great distance, and watched our movements. The Shag and Razorbill were both very scarce; we did not obtain an egg of either; they are probably only occasional breeders in this locality. The Ring Dotterel and Oyster Catcher are also not by any means common. The Eider Duck nests chiefly on the main or inner island, but is found on several of the other islands, and, though constantly found there, is in no great number. It likewise occasionally nests on the neighbouring mainland; we found a single nest so situated on our visit to this district. The Ring Dotterel, too, likewise breeds on the mainland; and we found several pairs of the Little Tern breeding on the shore at the Old Law, opposite to Holy Island; and on the "links" in this neighbourhood the Shieldrake is found nesting in rabbit holes. The Little Tern, I believe, is no longer found in this locality.

Fenham Flats, an extensive muddy "slake" lying between Holy Island and the shore, is frequented in autumn and winter by vast numbers of water fowl. The Brent Goose appears here in large flocks; and numbers of them are killed and sent to the

Newcastle poulterers for sale. Various species of Ducks and Waders occur in abundance; and many of our rarer visitants have been shot in this locality, namely, the Gadwall, Red Crested Duck, Pomerine Skua, and several others.

A "slake" of similar character, but of much less extent, was, until recently, found within the estuary of the Tyne. This is now, by the encroachments of man, in great measure destroyed as a resort of wild fowl. But not many years ago "Jarrow Slake" was frequented by great numbers of aquatic birds. The Wild Swan was occasionally shot there, and many of the Ducks and Waders, as well as most of the other birds that frequent the coast.

But the engineer has more than the destruction of this feeding ground to answer for: the shores of the Tyne, from the "Slake" almost to Newcastle, were admirably adapted to the habits of the Sandpipers and other Waders. The beautiful sweeping reaches, and projecting headlands, that diversified both shores, are rapidly disappearing, and in their place the straight lines of the engineer are being substituted. Those gravelly and muddy shores, the delight of these birds, are all gone.

The Cormorant appears to have been formerly very common on the Tyne, and its fishing propensities seem to have rendered it very obnoxious to the Municipal authorities of Newcastle, as the following extract from the Municipal accounts, kindly supplied to me by my friend Mr. Clephan, sufficiently testifies.

"1561, Nov. Paid for two gormorants heads slayne in this revir, 4d.
1654, Dec. Paid for three cormorants heads, 2s."

The estuary of the Tees is another great haunt of the aquatic tribes; but it is also fast disappearing as such to the demands of commerce. Upwards of two hundred years ago there was a great breeding station here. In Graves's "History of Cleveland," p. 399, there is a quotation from the Cott. MS., which is as follows:—

"Neere unto Dobham, (the Porte of the mouth of the Teese) the Shore lyes flatt, where a Shelfe of Sand raised above the highe water marke, entertaines an infynite number of sea-fowle, which laye theyr Egges heere and there scatteringlie in such

sorte, that in Tyme of breedinge one can hardly sett his Foote so warylye that he spoyle not many of theyr nests."

From this description of the locality, and from the number of the eggs, and their situation, it would appear that this colony was composed of Terns, or perhaps of the Lesser Black-backed Gull, or it may be of both species.

But no locality in the north of England had such interest for the naturalist as Prestwick Car. The botanist, the entomologist, the conchologist, and the ornithologist, were all equally interested in this one of nature's most famous nurseries. Here the naturalists of the district had resorted for several generations to collect the objects of their respective studies. And here also resorted the sportsman and the general lover of nature; for while Snipe and Duck abounded, and the pools were well stored with pike, perch, roach, and eels, it was the only piece of wild moorland left in this part of the county.

This hunting ground of the naturalist lies a little east of Ponteland, and about seven miles north of Newcastle. It is an area depressed, as if by subsidence, of about eleven hundred acres, and is of a rounded or subquadrangular form about two miles in diameter; and the surrounding land is little elevated. The greater and central portion is (or rather was, for it is now all changed) composed of peat, more or less covered with a growth of ling and heather, and of boggy, hummocky, coarse grass land: this central portion was surrounded by a belt of good pasture land varied with gorse or "whin." Towards the north and west boundaries there was a chain of pools, the largest and most important of which was called the Black Pool; towards the south extended another chain of pools, among which was the Moor-Spot Pool. The Black Pool could not be less than a mile in length, and was of considerable width. There were three islands in it, two towards the east, and one towards the west end. The drainage was through this sheet of water, from which there was a cut, or open ditch, to the River Pont; but the fall was so slight that the drainage was very incomplete, and the water flowed backwards and forwards in accordance with the state of the river. These pools were on a peaty bottom, in which the remains of

numerous trees, chiefly Scotch fir and birch, stood erect, and firmly rooted. They were not visible above the surface of the water, though, in droughty seasons, numbers of them were frequently exposed near the margins of the pools. The trees were of no great size, and, in most instances, the wood was in such a good state of preservation, and contained so much resin, that it was used by the neighbouring villagers for firewood.

When the Car was drained the sections of the ditches showed that the peat was of considerable thickness—twelve to fifteen feet at least, and rested upon gravel, which contained pebbles of Mountain-Limestone, in which were found the ordinary fossils of that formation. In places, patches of White Marl were deposited, containing the usual lacustrine shells. The gravel was most probably derived from the Boulder-Clay, which doubtless originally filled the basin of the Car, but had apparently been either entirely or partially removed, and the stratum of gravel redeposited, at the time, perhaps, when the Pont flowed over this area. After this, a change of level would seem to have taken place, when the basin became partially drained, with pools left here and there, in which the marl was formed. Then, the whole area was probably converted into one great swamp, and the peat accumulated. And here I may remark that Mr. Howse informs me, that during the draining operations, he found in the peat some remains of the deer, namely, a portion of the upper jaw with teeth, and a few ribs; and Mr. Atthey obtained from it two or three teeth of the horse; numerous fir cones were also found, and some hazel nuts. A few boles of the oak were also taken out of the peat, towards the east end of the Car, near Dinnington. At a later period the Car became sufficiently drained, probably by a further change of level, to allow the growth of the forest, the remains of which still existed in such an excellent state of preservation. Then another depression ensued and pools were formed in the peat; a stop was put to the further growth of trees, and the Car assumed the aspect it wore previously to its last fatal drainage by the hand of man.

Such is a concise description of this famous locality, this great field of research of our northern naturalists. And rich as it was

in botanical and entomological specimens, it was not less remarkable for its ornithological features. I know of no locality of the same limited area, where so many species of water-fowl were to be found breeding, as bred yearly at Prestwick Car.

Spynie Loch, near Elgin, is the only place that I could compare with it in this respect; but even in that rich breeding station fewer species have been taken than at Prestwick Car. In many respects these two localities were very similar, and they have both shared the same fate; they have both been recently drained and their feathered denizens consequently dispersed.

The nests of the following aquatic birds have been taken at Prestwick Car, namely, the Black-headed Gull, Wild Duck, Teal, Shoveller, Pintail Duck, Redshank, Dunlin, Wood Sandpiper, Snipe, Curlew, Ruff, Peewit, Water Hen, Water Crake, and Coot, in all, fifteen; besides which, there is reason to believe that the Gargany and Common Tern also bred there. As well as the above, a number of *Passeres* nested at the Car. Of these the following is a list:—the Meadow Pipit, Reed Bunting, Brown Linnet, Skylark, Stone Chat, Whin Chat, Hedge Accentor, Yellow Wagtail, Cuckoo, and probably some others. The Black Grouse has also bred there.

The following account of an excursion to Prestwick Car will give some idea of what could be done in bird nesting in that locality in a single day: it was however an extraordinary day, and was a very short one. I started, accompanied by the eldest son of the late Mr. Charles St. John, on the morning of the 3rd of June, 1853, rather for the purpose of showing my youthful friend the Car, than in any expectation of obtaining eggs, as the season was far advanced. We arrived at Berwick Hill, on the north margin of the Car, about eleven o'clock, after a pleasant eight miles walk. After receiving the hospitality of the late Mr. Richard Reay we commenced our ramble over the Car. That gentleman informed us that we should see no eggs, as several persons had recently been over the ground. This, however, did not matter much, as we had not come for the purpose of collecting eggs, but merely to look about us.

It was one o'clock before we reached the heather; and here

the Redshanks were flying in greater numbers than I had ever seen on any former occasion. Several pairs kept flying around above our heads uttering their wild, plaintive cry, or triple-noted whistle. From this it was evident that either their young or their eggs were not far off. And sure enough we had not proceeded many steps before we came upon a nest with four eggs: they were much incubated, and, being quite cold, were undoubtedly forsaken. We were now joined by Mr. Reay's brother (Joseph) who, just before he reached us, had picked up a young Redshank, considerably grown. We then strolled through the heather and soon found a Curlew's nest, with its full complement of eggs: these were also considerably incubated. We continued our ramble on the heather, when about three o'clock our dogs, a retriever and a setter, raised a bird about fifty yards in advance of us, which at once rose to a considerable height coursing about, rising and sinking somewhat in the manner of the Snipe, and like it, while sweeping downwards with outstretched tremulous wings, produced a peculiar drumming noise, but one much shriller than that of the Snipe, and almost amounting to a sort of musical whistle. From the strangeness of its actions and peculiar whistling or drumming noise, I was convinced that we had met with a rare bird, and that its nest was near at hand. I observed to my companions that it was either a Wood- or a Green-Sandpiper, and that we must have its nest before we left the Car. I had just uttered these words when one of the dogs rushed forward and pushed its nose into the heather. Mr. Reay advanced, and, on examining the spot, said, "Here's the nest with four eggs, but they are all smashed excepting one." A moment, however, sufficed to prove that the nest was that of a Snipe, though there was at first some difference of opinion expressed as to this. Nevertheless, I was quite satisfied that the nest of the strange bird was yet to be found. The dogs were now leashed. The birds were still in view flying about: our only chance now was to watch the bird to its nest. With a view to this I concealed myself amidst the heather, while my companions left the spot. It was not long before one of the birds "pitched," and, after allowing a little time for it to settle, I went forth to raise

it, but did not succeed. The bird, however, was soon in the air again, flying about as before. The watching dodge was again tried, and this time the bird was marked to, and raised from, its nest. There lay the nest, with its four pretty eggs, on the side of a dry hillock where grew some heath and grass, in the midst of a swampy spot. It was evidently the nest of the Wood-Sandpiper, as the eggs agreed exactly with those of that species which I had, in my collection, from the late Mr. Hoy. Indeed, we got so near to the bird, that it was not difficult to determine the species. But it was, notwithstanding, desirable to authenticate the eggs, so as to leave no room for doubt. We now made several vain endeavours to shoot the bird; and then, to give it time to settle, left the spot, and wandered, for about half an hour, to the west side of the heather, the nest being situated at the east end of it. But, previously to our doing so, Mr. Reay strayed with me in the direction of the spot where I had at first lain concealed to mark the bird to its nest, and when we arrived within a few paces of the spot a Shoveller rose, and there, amidst the heather, was its nest containing eight eggs. On the return of our party towards the nesting place of the Wood-Sandpiper we raised a Reeve, which we had before sprung twice or thrice. This time it rose from its nest, in which were the usual four eggs in a perfectly fresh state. At length we reached the nest, the great prize of the day, but the bird was not on. Both male and female, however, soon made their appearance over head, and a futile attempt was made to shoot them: they then both took off and settled by the side of a small pool in the middle of the heather. Mr. Reay then crept up and succeeded in killing the male bird. Thus, after several hours labour, we succeeded in establishing the fact, that our find was really the nest of the Wood-Sandpiper. And we had the satisfaction of knowing that this was the only instance of its having been taken in Britain.

Thus, in our afternoon's ramble over the Car, we had found the nests of six species of water fowl, three of which must be considered rare; and one had never before been found breeding in the British Islands. We did not see a single nest of the Peewit, the commonest bird of the Car; but, during our rambles to and

fro, vast numbers of this bird were hovering about in all directions in company with numerous Redshanks and Snipes, the latter all the while mingling their drumming noise with the constantly repeated cry of the Peewit. The Curlew also was there, and some of the other denizens of the swamp.

Prestwick Car was drained in 1857, and, with the drainage, many objects of interest to the naturalist have disappeared from the district. The botanist has lost a great field of research; the entomologist, too, has suffered greatly; and two or more species are lost to our local conchologists. The birds that congregated there have been dispersed, and several that had, on account of their breeding in that place ranked as residents, have now become mere visitants. The Ruff breeds nowhere else that I am aware of in the two counties, neither does the Dunlin, though it has been seen in the breeding season near Crag Lough. The Shoveller and Pintail, too, have now no breeding place in the district, and the Wood-Sandpiper belongs to the same category. And though these birds will no doubt continue to visit the locality, yet some of them at least will do so in diminished numbers, and will probably ultimately cease to make their appearance altogether.

A breeding station, such as Prestwick Car was, acts as a feeder to the ornithology of a district or country. Birds have a tendency to return, being attached to the place of their nativity. It is well known that the same pair of Swallows will return year after year to their old nesting place, that the Stork is ever constant to its home, regularly making its annual migration to the same place. This is also a patent fact with regard to the Rook; and it holds good with birds in general. The individuals themselves do not only return to their breeding places, but doubtless act as decoys in inducing others to join them. Hence the destruction of such a place as Prestwick Car cannot fail to materially affect the avifauna of the district.

This disturbing influence of the acts of man has been going on for many ages, and is now proceeding with accelerated force. It has already been stated that upwards of two hundred years ago a great feeding and breeding station of marine birds existed in

the estuary of the Tees; this is rapidly disappearing. The shores of the lower portion of the Tyne and "Jarrow Slake," also extensive feeding grounds, have of late years ceased to exist as such. Coquet Island, too, which was not long ago an extensive breeding station of the Terns, is no longer a home of these birds, three or four species of which bred there in great numbers. These changes have affected, and are affecting, sensibly, the character of our local avifauna. The operations of man will in the future affect it more and more, and will in like manner influence the distribution of the feathered tribes over the whole of the United Kingdom.

The Great Auk, at one time, visited our district: it is now, through the agency of man, extinct. The Eagle, at no great distance of time, inhabited the wilds of Cheviot where it bred: it is now banished. The Peregrine Falcon has almost ceased to breed in the district. The Buzzard and the Harriers no longer nest here; and the Raven now but rarely does so. All the birds of prey, in fact, and some others, are fast disappearing; and so far as this is the result of man's exigencies it is not to be censured, though it may be regretted. If the interests of man demand the sacrifice, so be it. But much of this sacrifice is not so demanded: it is made merely for the gratification of sportsmen and gamekeepers, a limited portion of the community. The wholesale destruction of the rapacious animals, including some of the noblest of the feathered races, by the game-preserver, is not only much to be deplored, but is likewise greatly to be deprecated.

This policy of the game-preserver is of questionable utility in promoting the increase of game; nor does it appear that much has been achieved in this respect, for, after some enquiry, I cannot ascertain that either Partridges or Grouse are more numerous than they were some years ago when birds of prey were yet to be seen on the wing. The fact is, that the rapacious birds never can exist in any great numbers in any one locality; they are not wont to tolerate each other's society. The Peregrine and the Harriers are the only species that prey to any extent upon game birds; and they will not trouble them much if birds of slower flight are within reach: it is only during the period when the

broods are imperfectly fledged that they can do much harm. But birds of prey are not an unmitigated evil; they are a necessary part of the great scheme of nature, and may be essential to the perfectly healthy development of the birds they feed upon. It is undoubtedly advantageous that the feebly organized and sickly individuals should be weeded out, and this is done by birds of prey. We have of late years heard much about stamping out epidemics among mankind. It is a function of the Peregrine and its congeners to assist in stamping out epidemics among game birds.

"Vermin" not only eat birds, but also birds' eggs. Almost all birds eat eggs; but where is the great harm? scarcely a brood less is reared in consequence. If one set of eggs be taken another is supplied, and so on till a brood is hatched and reared. Nature provides a redundancy of offspring to insure, so to speak, the continuance of the species. Look at the tens of thousands of acorns that are formed that one tree may be developed, the rest supply food to various animals. Look again at the myriads of pollen grains that are scattered in the breeze, and, as it were, lost. The redundant fecundity of the cod fish gives abundant food to thousands of small animals. Something of this sort takes place with birds: nature has given to them the power of producing eggs until a brood is reared in case the early layings are taken for food; in fact, the early nests are frequently deserted voluntarily by the parent birds. And who can say that this may not be wise economy? We see in all kinds of poultry extreme examples of this fecundity; the Hen goes on laying until she is inclined and permitted to sit and rear her offspring.

Some of the doings of the gamekeeper seem worthy of the attention of the Society for the Prevention of Cruelty to Animals. The use of strychnine is, I believe, prohibited by Act of Parliament: it is nevertheless extensively used in the destruction of Crows, etc. It is impossible to imagine a more cruel or dangerous practice. Trapping of birds, and leaving them for days to flap themselves to death are acts, to say the least of them, cruel in the extreme. Is it not surprising that the magistrate, who permits his gamekeeper to perpetrate such barbarities, can gravely commit the poor

cartman who drives a galled horse, when perhaps his dinner depends upon the act; or the youth for worrying a cat, or indulging in a Duck hunt, on a charge of cruelty?

Hence the game-preserver ought to be careful how he destroys the balance of life; for though his efforts may not have had much influence in the production of game, they have had a very sensible effect in other directions. Certain prolific species, both of birds and mammals, have of late years vastly increased. The Ring Dove or Wood Pigeon has become, in some parts of Scotland, a great nuisance, on account of its vast numerical increase. And I am informed by Mr. Langlands, of Old Bewick, that within the last few years this bird has greatly increased in Northumberland, and that it has there become injurious to the farmer. That gentleman attributes the increase of this species to the destruction of "birds of prey, and especially of the Magpies." Starlings likewise have increased enormously within the last twenty or thirty years in the neighbourhood of Newcastle, and indeed over the whole district; and the smaller *Passeres* seem also on the increase. But perhaps the greatest evil arising from the interference with the balance of life by the game-preserver is the rapid growth of the numbers of the rat—a useful animal while restrained within its natural limits. The field mouse has likewise become detrimental. The Weasel, Stoat, Buzzard, Kestrel, and Owls, all natural checks to the over development of these most prolific mammals, having been destroyed by man, the rat and the mouse range undisturbed. The rat has taken possession of the hedge banks, and the sides of pools and rivulets, and has become a complete nuisance to the farmstead, where, on account of its ravages, it is difficult to rear fowls, particularly Ducks. The gardens suffer severely from mice, and so destructive are they in some localities, that it is almost impossible to grow crocuses or other bulbous plants. The rabbit, too, from the same cause, has in many districts over-run the country, and become a serious evil.

There has been no discrimination used in the slaughter of the so-called "vermin:" not only harmless, but even useful, birds have been destroyed. The Kestrel, which preys almost entirely

on field mice, young rats, and insects, is being everywhere recklessly shot down. The Owls, too, the police of the stack-garth, are sacrificed with equal disregard; and since the gamekeeper can find nothing else to exercise his skill upon, he has taken to trap and shoot such harmless creatures as the squirrel, hedgehog, and Dipper. This last does not only not eat salmon spawn, as it has been accused of doing, but is really of service, for it devours aquatic insects that are injurious to the spawn; this I have proved by dissection. And the Cuckoo, on account of its Hawk-like appearance, has been threatened by the ignorant and over zealous gamekeeper. Indeed, I have seen one of these birds nailed on a wall along with Hawks and Daws; and on pointing this out to the gamekeeper, and making the observation, "Why, this is not a Hawk!" the sulky reply was, "Why, if it isn't, it's very like one!" The Goatsucker's turn will come next, on account of its resemblance to the Cuckoo.

From the operations of man, and particularly from the disturbing influence of the game-preserver, the avifauna of the district has been, and is being, considerably modified in its distribution. Some visitants that were common have become rare, as for instance the Bittern, the Stork, the Osprey, the Kite. Several residents that once bred in this district are now merely visitants. The Eagle bred on Cheviot, the Peregrine bred in several localities within the district, and so did the Common Buzzard, the Moor Buzzard, the Hen Harrier, Wryneck, and Nuthatch. The Ruff, the Dunlin, the Redshank, the Shoveller, and Pintail will now in all probability cease to breed here, and many other species are being in like manner rapidly banished. Of these may be mentioned the Raven, the Carrion Crow, the Magpie, the Jay, the Merlin, the Kestrel, the Sparrow Hawk, the Wood Owl, the Long-eared Owl, the White Owl.

It is pleasing to remark that there is apparently an awakening to the fact that the destruction of birds may be an evil. This seems to be evinced by the passing of the recent Acts of Parliament for the protection of birds during the breeding season. Two such acts have passed the Legislature; the first in 1869, the second in 1873: the former relates exclusively to marine birds,

which, on account of their breeding in society in vast numbers, fell an easy prey to the gunner, and were fast disappearing. This Act will no doubt do much to save the few nesting stations still left on our seaboard. But I fear, notwithstanding, that the Black-headed Gull, which nests inland, will soon be entirely exterminated in our district, where it is the greatest ornament of our moor-lands, for the gamekeeper is everywhere destroying its eggs. The inland colonies also of the Lesser Black-backed Gull are likewise fast disappearing. These two species, being ranked with "vermin," for they are accused of destroying the eggs of the Grouse, must soon perish accordingly.

The second Act came into operation on the 15th of March, 1873, and is for the protection of the small or land birds, but it is drawn up in the most inefficient manner possible, and it is difficult to see on what principle it is based. The schedule of the species to be protected shows nothing so clearly as the extreme ignorance on the subject of those who drew it up. Some species stand in it under two, three, or even four different names, as if they were so many distinct species: and it is altogether so imperfect, that it will be difficult to convict under it. The endeavour seems to be to exclude the granivorous birds; but not half the insectivorous species are included. It is very well to protect the latter, such as the Swallows and the Warblers; but as they are migrants, any diminution in their numbers would soon be restored. The resident species are those that most require protection, and yet these are, to a great extent, left beyond the pale of the Act. How the magistrate is to determine the species it is difficult to say. Even had the schedule been all that could be desired this would not be an easy matter, unless he be an ornithologist. The Chiff Chaff, for instance, will have to be discriminated from the Willow Wren, the former being included in the schedule, the latter left out.

The most lamentable feature however of the Act is that some species, the greatest favourites of the public, are excluded: the Lark, the Thrush, and the Blackbird, for instance, the most charming songsters we have, are to perish.

There should also have been a clause in the Act permitting

specimens to be taken for scientific purposes; for it is absolutely necessary that in our public Museums birds should be preserved in their various plumages. Henceforth, if this Act, unaltered, be strictly enforced, it will be impossible to procure specimens of the protected birds in their breeding and first or nest plumages.

All that can be said in favour of this measure is that it evinces a desire to do something for the preservation of the feathered tribes, and that it gives hope that before long something more rational and more efficient will be produced.

The most remarkable feature in our catalogue is perhaps its numerical extent. We have seen that in this respect it does not fall far behind that of Norfolk, a county remarkable for the extent of its avifauna.

The two hundred and sixty-five species of our catalogue are divisible into residents, spring-and-autumn migrants, autumn or winter visitants, and casual visitants. And here a few words are necessary to explain the exact sense in which these terms are employed. At the same time it must be understood that they are applicable only to the birds of our district; for a species with us may be a mere casual visitant or winter visitant, while it is a resident British bird.

A resident is a species that remains in the district throughout the year, whether it breeds in it or not. If a few individuals only remain throughout the year though the greater number migrate, the species is considered a resident. The Sparrow, Common Gull, and Crossbill, are examples.

A spring-and-autumn migrant arrives in spring, breeds in the district, and departs in autumn. Of this, the Swallow is a type.

An autumn or winter visitant arrives in autumn or winter, and departs shortly or sojourns till spring. Examples are the Green Sandpiper and the Fieldfare.

A casual visitant is one that does not regularly visit the district, but whose appearance is uncertain. Under this term are included not only the species which visit the district at irregular periods, of which the Hoopoe and Rose-coloured Pastor are examples, but those likewise that are mere strays, such as Pallas's Sand Grouse and White's Thrush.

CATALOGUE.

Class. AVES.

Order I. ACCIPITRES, *Linnæus.*

Family. FALCONIDÆ, *Leach, Vigors.*

1. AQUILA, *Gmelin.*

1. Golden Eagle. A. fulva, (*Linnæus.*)

Falco fulvus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 21.

Aquila chrysætos, Yarrell, Hist. Brit. Birds, Ed. 4, I., 11.

A casual visitant. This noble bird has very rarely occurred within our district.

It is stated in Wallis's History of Northumberland, published in 1769, that "On the highest and steepest part of Cheviot, so called from its being the chief of the mountains round it, the Eagle sometimes has its airy. Two beautiful ones were bred there a few years ago, one of which was shot by a gentleman's servant. A sportsman afterwards killed one of the parent birds."

This is mentioned as the Golden Eagle, and probably correctly; for while this species generally breeds inland, the White-tailed Eagle usually breeds near the sea. Two other Eagles are mentioned by Wallis, one having been killed at Warkworth, the other near Tindal House; but there is nothing to show that they belonged to this species.

In Hogg's catalogue of the birds found near Stockton, it is stated that a Golden Eagle was shot in that neighbourhood on the 25th November, 1823. But this was undoubtedly the White-tailed species, as is evinced by the measurements of the specimen which are given.

It is recorded in the "Newcastle Chronicle," November 4th, 1797, that "an Eagle of the Ring-tailed kind" was shot a few

days before at Elsdon, and brought to Newcastle for preservation, "measuring between the tips of the wings five feet eight inches." My attention has been kindly drawn to this paragraph by Mr. James Clephan. There can be little doubt that the specimen alluded to was really a Golden Eagle: the expression "Ring-tailed kind," and the measurement, would seem to prove this.

The Golden Eagle, which appears to have been formerly a resident in our district, can now only rank as a casual visitant.

When in Norway, in 1833, I had the satisfaction of seeing an eyry of the Golden Eagle. I was led to it by observing an Eagle perched on a cliff watching my movements, and on my approaching the spot it immediately rose, giving a cry of alarm. On this it was at once joined by its mate, which came from a crag higher up the mountain, and both birds kept circling about, high above my head. It was evident that their nest was not far off. I then ascended towards the crag from which the second Eagle came, and, as I advanced, the birds approached closer and closer to me, uttering their peculiar hoarse, barking cry. I continued advancing till I was within twenty or thirty yards of the nest. The birds then came swooping down, rushing towards my head, and striking out their powerful legs, evidently to intimidate me. I could distinctly hear the whirring of their wings. It was not altogether very pleasant, particularly as I had nothing to defend myself with. I sought about and procured a stick, for I felt assured that had I come upon the nest they would have made an attack on me. It was beyond reach, however, being placed on a crag behind a projecting rock. It was afterwards ascertained by my companions, on a second ascent, to contain an egg and a young bird, and was of great size, being composed externally of sticks.

2. HALIAETUS, *Savigny.*

2. White-tailed Eagle. H. albicilla, *Linnæus.*

Falco albicilla, Bewick, Hist. Brit. Birds, Ed. 1847, I., 25.

Haliætus albicilla, Yarrell, Hist. Brit. Birds, Ed. 4, I., 25.

This is a rare casual visitant.

In Selby's catalogue three White-tailed Eagles are stated to

have been shot at Chillingham Park a few years before the publication of that catalogue (1831). And it is also stated, that in the winter of 1828 two immature birds were killed upon the coast, one at Holy Island, the other at Scremerston, near Berwick. Another is likewise mentioned as having been killed near Morpeth.

To these I have to add the capture of an immature specimen, in 1837, at Morpeth High House. This fine example is in the Newcastle Museum. Others have occurred within the district.

Many years ago, as I was walking by Lambton Park wall, near Lumley Thicks, a bird of this species flew across my path, with several rooks in pursuit, and went into the park. It remained there for a few days, when I again had an opportunity of seeing it. It afterwards went to Ravensworth, where it sojourned for some time, and ultimately made a safe retreat.

3. PANDION, *Savigny.*

3. Osprey. P. haliaetus, (*Linnæus.*)

Falco haliaetus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 29.

Pandion haliætus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 30.

This interesting species occurs in our district not unfrequently; but, previously to the draining of Prestwick Car, it might almost have been considered an annual migrant, though now it must rank with the casual visitants. I have had six specimens of it in my possession, all captured in the two northern counties. Of these one was winged near Morpeth, October 9th, 1830, and is now in the Newcastle Museum; two were taken on the rigging of ships off the Northumberland coast in September, 1835; another was shot, a fine male specimen, May, 1838, at Newburn on the Tyne; and a female was taken near Heworth, on the 23rd September, 1841; both of these are in my collection. The sixth was killed near Woodburn on the Reedwater, September, 1850.

Besides these, five other specimens are entered in my journal, as captured within our district, between the years 1830 and 1860.

On the 12th of May, 1856, I had the good fortune to witness an Osprey fishing at Prestwick Car. It made several stoops, and at length carried off a fish of considerable size; and, as it flew close over my head, I had an excellent opportunity of observing with my pocket telescope how it carried its prey. The fish hung down, for some distance below the bird, lengthwise and parallel with its body. Four days afterwards I visited the Car again, and again had the satisfaction of seeing it fishing. This time I found it perched on a post in the Black Pool, but it soon rose on the wing and made several stoops with great vigour, dashing into the water with amazing velocity, though it did not succeed in taking a fish while I watched it.

The specimen mentioned in Mr. Selby's catalogue, as having been shot at Prestwick Car, came into my possession on the death of the late Henry Hewitson, Esq. It was a fine mature bird; but being much injured with moths, it could not be preserved.

The Osprey does not vary much in plumage. The birds that occur in the latter part of the year have usually the feathers of the upper parts margined with white or pale buff. As the plumage in these cases is quite fresh, it appears that these birds are either in the first plumage, or have recently moulted. Old, breeding birds, or those occurring in the early part of the year, have the feathers of the upper parts of a uniform brown colour, and much worn. This is the only variation I have met with, and hence the inference that the uniform colour is produced by the pale margins of the feathers having been worn off, and that the mature plumage and the first or nest plumage do not, in fact, vary; it is merely the wearing off of the tips of the feathers that gives the breeding birds the appearance of a distinct dress.

4. BUTEO, *G. Cuvier.*

4. Common Buzzard. B. vulgaris, (*Linnæus.*)

Falco buteo, Bewick, Hist. Brit. Birds, Ed. 1847, I., 38.

Buteo vulgaris, Yarrell, Hist. Brit. Birds, Ed. 4, I., 109.

A casual visitant.

This species, like all the larger birds of prey, is fast disappearing everywhere under the influence of the gamekeeper's gun and trap. Some years ago it bred in the district: it is now a rare casual visitant here. In 1835 I saw several specimens in the collection of the late Mr. Smurthwaite, of Staindrop, all of which that gentleman informed me had been recently taken in that neighbourhood.

One individual, in my own collection, was obtained at Ravensworth, February, 1837. Another was killed October, 1852. In the stomach of the latter were found the remains of four moles and one frog. In March, 1856, I found a fine specimen washed up on Whitburn Sands. This, which is in my collection, has the breast of a beautiful buff colour, resembling the specimens that occur in France.

This is a very variable species, scarcely any two individuals being alike. The changes of the plumage do not appear to be understood: whether or to what extent the plumage is influenced by age or sex is not as yet determined.

5. ARCHIBUTEO, *Brehm.*

5. Rough-legged Buzzard. A. lagopus, (*Brunn.*)

Falco lagopus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 40.

Buteo lagopus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 115.

This is a rare casual visitant to our district. I have only three captures of it to record. One was shot in Walbottle Dene, October, 1831; another at Marsden, in 1823, which is now in the Newcastle Museum; the third was killed at Bishop Auckland, in 1840. About that time several specimens occurred on both sides of the Tees and in Westmoreland.

This species takes occasionally the smaller mammals: I have taken out of the crop the greater portion of a stoat. There had evidently been a severe struggle between the captor and the captured, for a considerable strip of the skin, with the feathers of the throat, had been torn away.

6. PERNIS, *G. Cuvier.*

6. Honey Buzzard. P. apivorus, (*Linnæus.*)

Falco apivorus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 42.

Pernis apivorus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 121.

This is a spring-and-autumn migrant. Mr. Selby considers the Honey Buzzard to be one of the rarest of the *Falconidæ*, and records in his catalogue the occurrence of only two individuals. It is certainly now, according to my experience, one of the commonest larger birds of prey. Since 1831, and up to 1868, twenty-five specimens have come under my notice, all taken within the two counties.

It occasionally breeds in the district. In 1841 it bred at Newbiggin, near Hexham. I obtained two of the young of this brood in August; they were shot while perched on a branch of the tree in which the nest was placed; their feathers were not fully grown, and it is evident that these birds could scarcely fly; they are in my collection. Young birds very much predominate, and usually two or three are taken about the same time and near the same place, as if they belonged to the same brood. Out of the twenty-five captures above alluded to, only three were ascertained to be mature birds.

This species arrives on our coast in May, and takes its departure in August, September, and October, the old birds leaving the district first, the immature frequently not till the middle of October. I have in my possession a fine mature specimen that was picked up, drowned, on Whitley Sands, when I was on the beach, on the 27th of August, 1835. I found one myself on the 22nd of September, 1841, an immature bird, washed up on Blyth Sands. About a fortnight afterwards, the remains of another immature specimen were found on the beach, near Newbiggin-by-the-Sea. These birds had no doubt been attempting to leave the coast, but meeting probably with thick or stormy weather, had perished.

I kept two or three Honey Buzzards alive for some time; they were very gentle in their habits, showing no signs of fear, and

even from the time of their capture never attempting to bite, or strike with their talons, as all other rapacious birds do.

Macgillivray has changed the name of this species to that of Beehawk, but apparently without any good reason. One of my captives, on being offered some fresh honeycomb, made a chuckling noise of delight and ate it with avidity, preferring the honey apparently to the bees which were in it, for which it did not care much. It also ate pieces of the flesh of birds, picking the bones clean, and leaving them as well as the feathers. When the honey failed I gave it some strawberry jam, made very sweet by adding sugar; it took this with apparent relish.

The crop of several individuals examined contained a great number of pupæ and larvæ of wasps, as well as a few mature wasps. In one instance I found the crop to contain bees and recently hatched birds; in another were found pupæ of Noctuæ, and the remains of Coleoptera.

The plumage of this species varies much, scarcely two individuals being found alike; but the changes do not appear to be clearly understood. There are two principal complexions or varieties,—one dark, the other pale, affecting equally the sexes, the adult and the immature individuals.

The adult male of the first or dark variety has the upper parts dark brown; the under parts have the feathers white, each having three or four wide transverse brown bands, the brown predominating; towards the head the feathers are streaked longitudinally with dark brown; the front of the head is of a clear ash grey, the feathers of the crown and nape white, tipped with brownish buff; tail with three or four broad brown bands, and smaller intermediate wavy ones tipped with white; quills dark brown or black; irides, cere, and feet, yellow.

The adult male of the second, or pale variety, has the upper parts uniformly brown, the under parts white, with a few brown transverse broken bands or streaks of brown on the neck, flanks, and under tail coverts; head with the front and sides of a clear ash colour; tail and quills as in the dark variety; irides, cere, and feet, yellow.

The adult female of the first or dark variety is the same as the

male of the dark variety, with the exception of the head, which has none of the ash colour in front.

The adult female of the second or pale variety has the upper parts brown; the under parts white, each feather having a dark brown streak in the centre, which widens into an elongated spot at the tip; flanks, belly, thighs, and under tail coverts barred transversely with dark brown, the white predominating; head and neck with the feathers white, streaked and largely tipped with brown; throat white; tail and quills as in the male; irides, cere, and feet, yellow.

The lower figure (Plate I.) represents the darkest complexioned individual I have seen of the first or dark variety in the nest plumage. It is of a uniform dark brown, with the occipital feathers slightly tipped with buff, and with a very narrow band of the same colour in front of the head; the primaries are nearly black, the tail as in the adult; irides brown; cere and feet, yellow.

The upper figure (Plate I.) represents an extremely pale complexioned individual in the nest plumage. It has the back and scapulars brown, tipped slightly with white; coverts and secondaries nearly black; head dull white, both sides with an oblong spot of brown, in which the eyes are situated; a brown band extends across the head in front leaving a pale frontal band, and between the eyes another brown band passes across the occiput; the whole of the under parts are white or pale buff, with the shafts of the feathers brown; irides grey; cere and feet, yellow.

The adult male in both varieties is at once recognized by the clear ash colour on the head, and the yellow irides; the adult female by the deficiency of this colour on the head, and by the yellow irides; and the immature male and female may be distinguished by the buff band in front of the head, and brown or grey irides. Specimens occur both in the adult and immature states, in every degree of shade, between the dark and pale varieties.

The individual shot at Thrunton Wood, in the parish of Whittingham, in 1829, and described by the Hon. H. T. Liddell in the "Transactions of the Natural History Society of Newcastle,"

belongs to the dark variety; but it is difficult to say whether it was mature or immature, or of which sex it was, as the colour of the head and irides is not mentioned.

7. MILVUS, *G. Cuvier.*

7. KITE. M. REGALIS, *Brisson.*

Falco milvus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 36.

Milvus vulgaris, Yarrell, Hist. Brit. Birds, Ed. 4, I., 92.

This is a rare casual visitant in the north of England. I know of only four instances of its occurrence; three near Bishop Auckland, in 1834, and one at Howick, Northumberland, in the same year; one of the former is in my possession.

8. BLACK KITE. M. ATER, (*Gmelin.*)

Milvus migrans, Yarrell, Hist. Brit. Birds, Ed. 4, I., 97.

Milvus migrans, Hancock, Ibis, Vol. III., p. 253.

A very rare casual visitant.

A fine mature specimen was taken in a trap by Mr. F. Fulger, gamekeeper, in the Deer Park at Alnwick, May, 1866. It is in my collection: I received it in the flesh; it proved, on dissection, to be a male. This, I believe, is the only example of the capture of this interesting species in the British Islands.

8. HIEROFALCO, *G. Cuvier.*

9. ICELAND FALCON. H. ISLANDICUS, *Brehm.*

Falco Islandus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 46.

Falco Islandicus, Hancock, Ann. and Mag. of Nat. Hist., 2nd Ser., Vol. XIII., p. 110.

An immature male of this rare casual visitant was shot, January, 1845, near Bellingham, North Tyne. This specimen is in my collection.

The individual in the Newcastle Museum is stated, in Selby's catalogue, to have been killed in Northumberland, but there is some uncertainty as to this.

I can see no character to distinguish this species from the Gyr-Falcon of the older writers, obtained in Norway. After a careful examination of numerous examples of both forms, I am satisfied that the Iceland and the Norwegian bird are either mere varieties, or races of the same species.

It was by the study of the plumage of this species, and its near ally the Greenland Falcon, that I determined the fact that these birds attain their mature dress on the first moult, and never afterwards change it. My attention was first drawn to this subject in 1833, and in 1838 I read a paper to the British Association announcing the fact.* This was afterwards corroborated by an attentive examination of the changes of plumage of two living examples; one in my own possession, which I received in 1842, and which moulted once while I had it; the other was in the gardens of the Zoological Society, London, and when I first saw it in April, 1849, it was in the first or nest plumage, but had got a few mature feathers. I made a sketch of it at the time; I again saw it in 1851, and again sketched it; it was then completely mature.† It lived till 1852, and had moulted three times. It is now in my possession. In both cases on the first moult the plumage had the characters of the adult.

Not only do all the noble or true Falcons acquire their adult plumage on the first moult, but many of the ignoble species do so likewise, as the Honey Buzzard, the Goshawk, the Sparrow-hawk, and the Harriers. This fact cannot be too strongly pressed on the attention of ornithologists, for it leads to a correct understanding of the variations of the plumage of the Falconidæ.

It may not, perhaps, be out of place to mention, that the eggs of the true Falcons can be readily distinguished from the "ignoble." The eggs of the former, the true Falcons, are of a pale yellow colour when held up to the light and looked at from the interior of the shell. The eggs of the Eagles, Buzzards, Hawks, etc., when examined in the same manner, are of a pale green hue.

* Ann. and Mag. Nat. Hist., Vol. II., p. 241.

† Ann. and Mag. Nat. Hist., 2nd Ser., Vol. XIII., p. 110.

9. FALCO, *Linnæus.*

10. PEREGRINE FALCON. F. PEREGRINUS, (*Gmelin.*)

Falco peregrinus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 11.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 53.

Some years ago this noble species was not by any means uncommon in the north of England. Formerly it bred, every year, in the wild parts of the two counties, but now it can scarcely be said to do so. I am informed, however, by Mr. Arthur Newall, that a nest of young birds was taken last year, 1872, at Langley Ford, near the Cheviot. It built annually, some years ago, at Thrunton Crag, in the vale of Whittingham; and, as it still occasionally breeds in the district, we can yet claim it as a resident species.

The Peregrine was seen this spring, 1873, at Little Whickhope, North Tyne, when it drove off the Ravens which were breeding in the crag there. I am indebted to John Coppin, Esq., for this information; and I am happy to say that that gentleman is not disposed to destroy this fine bird, though it may deprive him of a few Grouse.

The movements of birds of prey usually cause great commotion among their feathered brethren. Wherever they appear, large and small unite in the chase, and endeavour to drive away or intimidate the common enemy. I was therefore much surprised one day, while sauntering on the shores of Spynie Loch, in company with my late friend Mr. Charles St. John, to observe a Peregrine quietly perched on a stone in the shallow water near the shore, surrounded by numerous wild Ducks resting on the water in complete repose, and quite indifferent to the close proximity of their arch enemy, who took just as little notice of them.

Specimens from different localities vary considerably in plumage. I have seen individuals with the under parts quite rufous, approaching in this respect *F. peregrinator*, of India. A fine example of this variety, killed in Scotland, is in the possession of Mr. George Freeman, of Newcastle. It is therefore pretty

evident that this so-called species should rank merely as a race or variety. In some specimens again the rufous colour is in patches, and in others it becomes less and less, until it entirely disappears, and the ground colour of the under parts is pure white. Another variety has the ground of a pale cold grey, with the transverse bands blending somewhat together.

This Falcon is the most noble and elegant of rapacious birds; his fine, angular, compact form, can best be studied and only fully appreciated by the falconer. The firm but easy manner in which the bird rests upon his perch, his tarsi almost straight, his body erect, his head gracefully poised upon his wide majestic shoulders, and the glance of his quiet, piercing, brilliant eye, are all the constant admiration of the falconer; but when thus represented in art, it has a stiff, formal appearance to the uninitiated. Of course, this noble bird is seen to the greatest advantage while he is "waiting on," and while he is making his rapid and repeated stoops upon the quarry.

With a view of attaining an accurate knowledge of the form and habits of the Falcon I have trained nearly all the British species; and, in preserving specimens of them for my collection, have availed myself of the information so gained. But, notwithstanding all my pains, I could never satisfy an old fastidious friend of mine, who was himself a great admirer of Nature, and a very good bird-stuffer. His criticism always went to the same tune—"Very good, sir! very good! but is it not rather stiff on its legs?" My friend had to visit me at a certain hour one day, so I thought I would test him. I brought my trained Greenland Falcon into the work-room and put him to one side on his perch, all ready for the field, hooded, belled, and leashed. He at once became as stationary as a statue, and in his quiet graceful repose looked as much like a stuffed bird as any that surrounded him. In came my expected friend. "Well, have you been doing anything new of late?" "There is a Falcon," said I, pointing to the bird ready equipped for the field; "what do you think of him?" "Good, sir! very good! but don't you think his legs r-a-ther stiff?" and, as he spoke, he advanced a step or two towards the Falcon, which, becoming alarmed at the near

approach of some one, turned its head a little in the direction of the critic. "Tut, tut, sir! what are you up to now? what joke is this?" said my friend, thinking that by some mechanism I had contrived to make the supposed stuffed bird turn his head. He then put his hand upon the back of the Falcon, which at once raised its wings. My friend started and exclaimed, "Why, sir, the bird is alive!" "Yes! yes!" I rejoined, "*but is it not rather stiff on its legs?*" This was the last time I ever heard any criticism on the stiffness of my Falcon's legs.

11. Hobby. F. subbuteo, *Linnæus.*

Falco subbuteo, Bewick, Hist. Brit. Birds, Ed. 1847, I., 13.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 65.

A rare casual visitant. I obtained, several years ago, an adult female which was killed in Streatlam Park, near Staindrop. This was apparently a breeding bird, and probably had its nest in that locality. It is the specimen alluded to in Selby's catalogue. Another individual was shot near Thornley, Durham, September, 1832, and is now in the Durham University Museum. A male was shot on Newcastle Town Moor, 25th July, 1853. To Mr. Duncan, animal preserver, I am indebted for this information. A second example, also a male, was killed at the same place on the 15th August, 1859, and is now in the Newcastle Museum; and an adult female was shot at Cullercoats on the 2nd June, 1863, and is in the possession of Mr. M. C. Woods, of Holleyn Hall.

Notwithstanding the probability of the Streatlam specimen having bred there, yet, as there is no clear proof of the species ever having done so in either of the two counties, it must be considered a mere casual visitant.

12. Red-footed Falcon. F. vespertinus, *Linnæus.*

Falco vespertinus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 69.

Erythropus vespertinus, Gould, Birds of Gt. Britain, Part XVI.

This rare casual visitant has occurred twice or thrice in our district. A mature male was shot at the Trow Rocks, South

Shields, October, 1836, and is in my collection. An example, in first plumage, was killed near Morpeth, August, 1858; and a third specimen is stated, on the authority of Mr. R. C. Embleton, to have been found at Hauxley, October, 1868. This is mentioned in Tate's "History of Alnwick."

I have a large series of specimens of this species from the continent, in various stages of plumage, from which it appears that this, like the other true Falcons, obtains the mature dress on the first moult. It is probable, however, that, occasionally, the whole of the feathers are not shed, a few of those of the tail and wing coverts being retained. The vignette in Yarrell's Fourth Edition, Vol. I., p. 73, represents a young male in this state, but it may be, in such cases, that the bird is still in the moult. In the Peregrine, sometimes, a few of the nest feathers are retained till the second moult. This partial change of feathers occurs in many birds at all ages.

13. Merlin. F. æsalon, *Gmelin.*

Falco æsalon, Bewick, Hist. Brit. Birds, Ed. 1847, I., 15.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 74.

This small and elegant species is a resident and breeds on our moors amidst the heather, preferring a sloping ground where there are large tumbled stones; but it occasionally breeds in trees. I saw a nest so situated in Norway, in 1833, when on an ornithological tour in company with my friend, Mr. W. C. Hewitson. And I was informed by the late Mr. Lovat, gamekeeper at Hesleyside, that, on the 27th of June, 1849, he met with a brood of young Merlins three miles west of that place. They occupied an old nest of the Carrion Crow, built in a birch tree, at a height of twelve to fifteen feet from the ground: he shot both the parent birds.

In July, 1866, in company with Mr. E. W. Brooks, I visited the breeding site of this species, on a slope by the side of the Black Burn, near Cragside, the residence of Sir W. G. Armstrong, C.B., and saw the two old birds and the four young ones perched on large stones: I believe it still breeds in that locality.

This beautiful little Falcon is rapidly disappearing, by the hand of the gamekeeper, from the north of England, and will, I fear, soon cease to give interest to our moorland rambles.

14. Kestrel or Windhover. F. tinnunculus, *Linnæus.*

Falco tinnunculus, Bew., Hist. Brit. Birds, Ed. 1847, I., 18, 20.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 78.

This is a resident, and the commonest Falcon in the north of England. It is usually seen suspended as it were in the air, with the wings in gentle motion. From this habit it has obtained the pretty descriptive name of Windhover.

I have more than once trained the Kestrel to come to the lure garnished with pieces of flesh, on which it had been taught to feed; but I could never tempt it to fly at small birds, though I have frequently tried to do so by throwing them under it when it was on the wing: it never took the slightest notice of them, but kept hovering gracefully, changing constantly its position as if seeking for its natural prey—beetles and mice. I see no reason for believing that it ever takes fledged birds, though it may occasionally harry a nest of newly hatched ones. I have examined great numbers of the rejected pellets of this bird, and have constantly found in them the elytra of coleopterous insects, and the bones of mice and voles; but never feathers or other remains of birds. Notwithstanding the inoffensive and useful habits of this interesting species, it is still very generally slaughtered by the gamekeeper, though in some localities its value is gradually becoming acknowledged.

10. ASTUR, *Lacépède.*

15. Goshawk. A. palumbarius, (*Linnæus.*)

Falco palumbarius, Bewick, Hist. Brit. Birds, Ed. 1847, I. 31.
Astur ,, Yarrell, Hist. Brit. Birds, Ed. 4, I. 83.

This is a rare casual visitant, and is not included in Selby's catalogue.

On the 19th of February, 1842, a mature female was shot by John Forster, Jun., Esq., of Shaftoe, in a plantation near Bolam Lake, Northumberland. Another mature female was taken in 1844 in a trap, at Bedlington, in the same county, and was, for some years, in the possession of Mr. Longridge. A fine mature female, now in the Newcastle Museum, was presented by Ralph Carr-Ellison, Esq. It was captured in Hulne Park, near Alnwick.

In April, 1845, an immature female was killed at Woodburn, on the Reedwater; and a mature female, which was shot in the neighbourhood of Castle Eden Dene, a few years ago, is in the possession of Rowland Burdon, Esq., of Castle Eden. A fine male specimen, in first plumage, for which I am indebted to the late Mr. George Balmer, was caught in a trap at Kielder, North Tyne, October, 1846; and I am informed by John Coppin, Esq., that a specimen was killed at Whickhope, North Tyne, February, 1854.

Three individuals are mentioned in the second edition of Yarrell, Vol. I., p. 64, as having been killed in Northumberland during the winter of 1831.

11. ACCIPITER, *Brisson.*

16. Sparrow Hawk. A. nisus, (*Linnæus.*)

Falco nisus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 34.

Accipiter nisus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 88.

A common resident; but not nearly so plentiful as formerly. It feeds on small birds, such as the Buntings, Sparrows, Thrushes, and Starlings.

I have a very interesting variety (figured in Pl. II.) of this species, that was shot on Tyneside in 1854: it is a male, and apparently adult. The under parts are entirely deprived of transverse bands; the throat, lower parts of the belly, vent, under tail coverts, and thighs are white, slightly tinged with rufous; the whole of the breast, flanks, and cheeks, clear rufous or tawny colour; the upper parts, tail, and quill feathers are of a pretty uniform greyish brown, somewhat intensified at the head and back of the neck; there is a white spot on the occipital region,

and a narrow inconspicuous streak above the eye; there are no distinct bands on the tail, of which the external feather on each side, and the two central ones, are entirely plain; the second, third, fourth, and fifth, on each side, have each two dark indistinct bars or spots.

This variety seems to hold the same relation to the European Sparrow Hawk as the *Accipiter rhodogaster*, *A. Stevensoni*, Gurney, and *Macronisus gularis*, Schlegel, do to *M. badius*, Gmelin. Indeed, the characters are very slight that distinguish these specifically from each other.

12. CIRCUS, *Lacépède.*

17. Marsh Harrier. C. æruginosus, (*Linnæus.*)

Falco rufus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 44.

Circus æruginosus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 127.

This fine species, which, a few years ago, was common on our swampy moorlands, where it bred, has now almost disappeared under the policy of the game-preserver, and has fallen, or is fast falling, from the rank of a resident, to that of a mere casual visitant. In 1823 I took a nest of it, with four eggs, on the moors at Wemmergill, near Middleton-in-Teesdale, the shooting box of the late Lord Strathmore. Both parent birds had been shot or trapped by the gamekeeper, and formed part of his museum, nailed against the stable walls. This collection was made up of Hawks, Owls, Daws, Buzzards, and such like "vermin," both biped and quadruped, being altogether one of the largest and most disgusting I have ever seen. It is now quite impossible in the north of England for any gamekeeper to form such another museum to bear testimony to his zeal and ignorance, as the so-called vermin no longer exist.

A few years ago my friend, Mr. Thomas Thompson, of Winlaton, obtained a nest with four eggs of the Marsh Harrier, near Haydon Bridge; and a female was shot at Hartington, near Durham, August, 1840.

The plumage of this species varies considerably, and ornithologists do not appear to be quite agreed respecting its changes. Yarrell, certainly, is in error when he says that birds of the year have the whole of the plumage chocolate brown, and that in the second year the head, nape, chin, and throat become of a dull yellow. In July, 1843, I obtained in Leadenhall Market three living examples of the Marsh Harrier in the nest plumage, having the feathers only partially grown, and the quills so short that the birds must have been taken near their nesting place. These individuals had the whole of the body of a dark chocolate brown, with the feathers narrowly bordered with reddish brown, the crown of the head, occiput, cheeks, and throat of a clear orange brown, and the auriculars dark brown, like the body, forming a dark patch chiefly behind the eye. The pale, bald appearance of the head would therefore seem to characterize the first or nest plumage. And from other specimens in my possession it would appear probable, if not certain, that the head afterwards becomes streaked with brown, and ultimately loses the bald appearance altogether, the streaks widening very much, so that the feathers are merely tipped and bordered with pale buff or yellowish white; and this is the case in both sexes.

There is a well marked variety of the Marsh Harrier, which appears to be plentiful in India. The figure given in Yarrell, and stated to be that of a mature male, represents this variety. The secondaries, great coverts, and tail feathers are of a clear blue grey; and the body both above and below is of a reddish brown streaked with darker brown, the back feathers and scapulars are somewhat darker than the rest. Specimens which are supposed to be of this variety, and which I take to be immature, have the brown tints both paler and redder than in the adult, and have the under parts of a reddish brown or ferruginous colour, almost without streaks or blotches; the head, neck, and front of the body considerably paler than the under parts. This well marked variety or race is without the dark patch behind the eye, so constant in the normal specimens.

Jerdon says that the figures in Yarrell and Gould were taken

from Indian specimens; and Blyth asserts that this variety has not been killed in Europe. I have, however, a specimen of it, which I received in the flesh, but where captured I am unable to say. It was purchased in Leadenhall Market by Mr. J. H. Gurney, Jun., and kindly presented to me. This specimen has the tail feathers, secondaries, and great coverts partially grey.

The mature male of our district is entirely without grey on those parts, and has the head streaked or spotted with brown. The adult female resembles the male; both sexes, as well as the young, have a dark patch behind the eye.

18. Hen Harrier. C. cyaneus, (*Linnæus.*)

Falco cyaneus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 46.

Circus ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 132.

A casual visitant. This is the commonest of the genus in the two northern counties; but, like the preceding species, it has now almost succumbed to the zeal of the gamekeeper. Mr. William Proctor, of Durham, informs me that it was common, and bred at Hedley Edge, on the Brancepeth Estate, about thirty years ago. I took the eggs, four in number, on the Wemmergill Moors, in 1823. I fear it can no longer be considered a resident in the district. It is still occasionally shot, though I have not seen a single individual for several years.

The late Mr. R. R. Wingate informed me that his father remembered when the Hen Harrier bred on the Newcastle Town Moor.

19. Montagu's Harrier, C. cineraceus, (*Montagu.*)

Falco cineraceus, Bewick, Brit. Birds, Ed. 1847, I., 39.

Circus ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 138.

A rare species in the north of England, where it was a resident, but is now probably only a casual visitant. Selby mentions the occurrence of three specimens; two killed in Northumberland, one in Durham. There are four individuals in my collection, two taken in Northumberland, and two in Durham.

One of these, a fine mature male, was shot on Morpeth Common, July, 1829; two, which are in the first or nest plumage, were shot at Wolsingham Park, in the county of Durham, 1835, and had undoubtedly been bred in that neighbourhood; and in the same year a fourth was killed in Northumberland, a male, and a fine example of the dark grey variety, being of a uniform black grey or smoke colour, entirely without markings.

Family. STRIGIDÆ, *Leach.*

13. SURNIA, *Duméril.*

20. Snowy Owl. S. nyctea, (*Linnæus.*)

Strix nyctea, Bewick, Hist. Brit. Birds, Ed. 1847, I., 53.

Nyctea scandiaca, Yarrell, Hist. Brit. Birds, Ed. 4, I., 187.

This large species is a rare visitant. Selby states in his catalogue that two fine specimens were killed in Northumberland in January, 1823, one, a female, at Rothbury, the other, a male, a few days afterwards, in the neighbourhood of Elsdon. The bird figured in Bewick, and stated to have been shot at Elsdon, is probably one of these specimens.

On the 7th November, 1858, a fine specimen was shot at Helmington, near Bishop Auckland, and is in the possession of Mr. Henry Gornall, of that place.

14. NYCTALE, *Brehm.*

21. Tengmalm's Owl. N. Tengmalmi, (*Gmelin.*)

Strix Tengmalmi, Bewick, Hist. Brit. Birds, Ed. 1847, I., 59.

Nyctale ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 154.

This is a rare casual visitant. I bought a fresh specimen of it at a poulterer's shop in Newcastle. It was shot near Whitburn, on the 11th or 12th October, 1848. Another specimen, shot at Rothbury in 1849, was presented to me by my friend Mr. Clement Lister, of Newcastle. These two fine specimens are still in my collection. Twelve or thirteen years ago I had

a living individual, which was taken at Widdrington, Northumberland. It lived for some time, and ultimately escaped. I fed it upon mice and pieces of flesh.

The example taken at Widdrington, in 1812 or 1813, and figured by both Bewick and Selby as *Strix passerina*, is *Nyctale Tengmalmi*. I have seen the specimen in Selby's collection, and there can be no doubt about the species. Selby corrects the mistake in his catalogue.

15. SYRNIUM, *Savigny*.

22. Tawny Owl. S. aluco (*Linnæus.*)

Strix aluco, Bewick, Hist. Brit. Birds, Ed. 1847, I., 55.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 146.

A common resident, frequenting woods. It breeds in trees, choosing those covered with ivy. A curious exception to this habit occurred to Mr. Thomas Thompson; he took a nest of it a few years ago, with three eggs, in a rabbit hole at Rowland's Gill, near Gibside.

This species preys chiefly on the smaller mammals, and frequents stack-garths for the purpose, and is consequently a valuable ally to the farmer: notwithstanding, the Tawny Owl is constantly seen nailed up in the gamekeeper's museum.

16. STRIX, *Linnæus*.

23. Barn Owl. Strix flammea, *Linnæus*.

Strix flammea, Bewick, Hist. Brit. Birds, Ed. 1847, I. 57.

Aluco ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 194.

A common resident species, but gradually diminishing in numbers like other birds of prey, and from the same cause. It feeds chiefly on rats and mice, and is consequently of great service to the agriculturist.

I have a remarkable variety of this species, which was shot in the district a few years ago. The whole of the under parts, which are usually white, are of a full tawny colour, as are the

legs and thighs; the face is also tinged with the same colour, and the upper parts have the tawny richer than usual.

17. OTUS, *G. Cuvier.*

24. Short-eared Owl. O. brachyotus, (*Forster.*)

Strix brachyotus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 61.

Asio accipitrinus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 163.

This is chiefly an autumn migrant, arriving on our coast in considerable numbers with the Woodcocks; but as it occasionally breeds in the district, it must rank as a resident. Late one autumn I sprung, in a rough stubble field, near Cleadon, four or five specimens. They had undoubtedly just arrived and were feeding on mice, which appeared to abound in the field. Upwards of forty years ago it bred on the moors at a place called Clint Burn, nine or ten miles above Bellingham. Two or three nests were taken there in consecutive years by the late Mr. L. J. Lovat, keeper at Hesleyside. Mr. Douglas also took the eggs of this species on the same moors, near Falstone, about the same time. The late Mr. R. R. Wingate picked up a young individual of the Short-eared Owl, near Brampton, Cumberland.

Mr. Isaac Clark informs me that the gamekeeper, at Longhirst, took a nest of this species, with three eggs, in 1872.

25. Long-eared Owl. O. vulgaris, *Fleming.*

Strix otus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 66.

Asio ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 158.

A resident. Common in wooded districts. Becoming less abundant every year, being stigmatised as "*vermin!*"

18. BUBO, *G. Cuvier.*

26. Eagle Owl. Bubo maximus, *Fleming.*

Strix bubo, Bewick, Hist. Brit. Birds, Ed. 1847, I. 64.

Bubo ignavus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 168.

I am obligingly informed by Mr. James Sutton, of Durham, who is a careful observer, and has an extensive collection of

birds and eggs, that he fired at an Eagle Owl on the "links," near North Sunderland, in October, 1872. He states that "it soared a great height after I fired, then descended to a rock on the beach: it again rose and flew at a great elevation, mostly in circles, away to the Farne Islands."

Order. II. PASSERES, *Linnæus.*

Family. PICIDÆ, *Vigors.*

19. PICUS, *Linnæus.*

1. Greater Spotted Woodpecker. P. major, *Linnæus.*

Picus major, Bewick, Hist. Brit. Birds, Ed. 1847, I., 278.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 148.

There are eight entries of the capture of this species in my journal between the years 1830 and 1868. This species appears to be commoner than the Green Woodpecker. Mr. William Dinning informs me that a nest of the Greater Spotted Woodpecker was taken at Swallowship, near Hexham, in an old willow stump, in June, 1868: two of the eggs are in his collection, and one in mine. This is the only instance with which I am acquainted of its breeding in the north of England: it must therefore be placed along with the residents, though it is usually an autumn or winter migrant.

2. Lesser Spotted Woodpecker. P. minor, *Linnæus.*

Picus minor, Bewick, Hist. Brit. Birds, Ed. 1847, I., 280.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 154.

An example of this rare casual visitant was shot upwards of forty years ago at Gosforth, near Newcastle, and is in my possession.

In Mr. Selby's catalogue it is stated that "a specimen was some time ago killed at Wallsend." In Wallis's History of Northumberland, one is recorded as having been shot in Dilston Park.

20. GECINUS, *Boie.*

3. Green Woodpecker. G. viridis, (*Linnæus.*)

Picus viridis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 276.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 137.

A resident. Not by any means common, but it occasionally breeds in the district. Mr. Isaac Clark took a nest of it with three eggs, at Minsteracres, two or three years ago.

According to Wallis, this species was frequent in Dilston Park before the trees were cut down.

21. YUNX, *Linnæus.*

4. Wryneck. Y. torquilla, *Linnæus.*

Yunx torquilla, Bewick, Hist. Brit. Birds, Ed. 1847, I., 288.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 158.

This is a spring-and-autumn migrant, and is far from common in Northumberland, but is more frequently seen in Durham. I shot one, near Hartley, April, 1833. A pair bred in the year 1813, and for four or five years after, in the garden at Cleadon House, the residence of the Rev. G. C. Abbs. This is the only instance I know of its having bred in the district, but as it is a spring-and-autumn migrant, it may be expected occasionally to do so, though this is probably about its northern limit.

Family. CUCULIDÆ, *Vigors.*

22. CUCULUS, *Linnæus.*

5. Cuckoo. C. canorus, *Linnæus.*

Cuculus canorus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 267.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 189.

This common and well known spring-and-autumn migrant has been found in this district to deposit its eggs in the nests of the following birds, namely, the Meadow Pipit, the Hedge Accentor, the Pied Wagtail, the Reed Bunting, the Grasshopper Warbler,

and the Willow Wren. That of the Meadow Pipit appears to be its favourite, as more than half of the number of the Cuckoo's eggs taken are found in the nests of this species.

The occurrence of the Cuckoo's egg in the Willow Wren's nest is of much interest. This has only once occurred in our district, namely, near Winlaton Mill, in May, 1870, as I am informed by Mr. Isaac Clark, of Blaydon, and a better or more trustworthy observer cannot exist. Other instances of the kind are however known. M. Montbeillard gives testimony as to the Cuckoo's egg having been taken out of the nest of the Willow Wren, but the fact has been questioned, as it is quite evident that the Cuckoo could not enter the Wren's nest, which is domed, and the entrance is at the side and very small, being just of sufficient size to permit the Wren to pass in and out. It appears, however, that Vaillant "obtained pretty satisfactory evidence that one at least of the African Cuckoos carries the egg in her bill." It is clear that this must also be the case with our European species, unless we refuse to believe both the testimony of M. Montbeillard, and the fact I have just recorded respecting the occurrence of the Cuckoo's eggs in the Willow Wren's nests. It appears to me that such evidence cannot be ignored; and moreover there is the case mentioned by Dr. Jenner* of a Cuckoo's egg found in a Wagtail's nest, in a hole under the eaves of a cottage, in which the difficulty is just as great as in the cases of the Cuckoo's eggs in the Willow Wren's nests.

In 1853, Dr. Baldamus published a paper, in which he maintains that the eggs of the Cuckoo partake of the colour of those of the foster parents. I have seen a great number of the eggs of this bird, but nothing to warrant in the least degree this opinion. Indeed, the eggs of the Cuckoo vary less than those of most other *Passeres*, and any such change of colour as the above would be a mere futile effort of nature. Birds do not discriminate nicely the colours or other characters of their eggs: the Barn-door Fowl will sit on chalk eggs, Duck's eggs, Pheasant's eggs, Partridge's eggs, Guinea Fowl's eggs, or almost any kind that is put into its nest.

Mr. Thomas Craster, Janitor of the Museum of the Newcastle

* Montagu's Ornithological Dictionary, 2nd Ed., p. 120.

Medical School, informs me that he set a domestic Pigeon with Waterhen's eggs, and they were duly hatched. Yarrell, in his "History of British Birds," mentions a Buzzard that hatched and reared several broods of the Common Fowl. All birds, of whatever colour their eggs may usually be, occasionally lay a white one, and these are incubated just as freely as if they were of the normal colour. Such being the case, what necessity is there for the theory of Dr. Baldamus?

Another point in the history of the Cuckoo seems still to be undecided. How are the young of the foster parents thrown out of the nest, as they always are a day or two after they are hatched? After Dr. Jenner's account of this performance, published in the "Philosophical Transactions" for 1788, it would seem quite impossible that any one should refuse to believe that this is achieved by the young Cuckoo. Yet such is the case, notwithstanding the corroborative testimony and experiments of Montagu (Ornithological Dictionary, Ed. 2, p. 117). This interesting fact has, however, been recently confirmed by a letter which appeared in "Nature," 14th May, 1872. This letter is by J. B., author of "Caw Caw," and contains an account of the process of ejection as witnessed by the writer, and it agrees perfectly with those originally published by Dr. Jenner and Montagu, so that now we have demonstrations of the fact by three competent eye-witnesses of it; and if such testimony is to be rejected, what other is to be believed?

The young of the foster parents are thrown out a day or two after they are hatched, and while the young Cuckoo is apparently so feeble that it might be supposed that it did not possess the power to accomplish such a feat. Hence it is, that the fact is by some persons still disputed. It is quite certain, however, that the young are ejected very soon after they are hatched: of this I have conclusive proof. On the 6th June, 1864, I observed a nest of the Hedge Accentor, which contained five eggs, four belonging to this bird, and one to the Cuckoo. I visited the nest again on the 8th June, and found three young Hedge Accentors and the Cuckoo hatched, one of the Hedge Accentor's eggs having disappeared: the three young Hedge Accentors lay on one side

of the nest, the Cuckoo on the other by itself. On the morning of the following day I once more went to the nest; the three Accentors were gone, and the Cuckoo was the sole occupant. One of the Accentors lay dead on the ground below the nest. On the 10th June I saw the foster parents feeding the Cuckoo; on the 12th the nest was destroyed, probably by a mouse, and the Cuckoo also had disappeared.

When the egg of the Cuckoo is not hatched, the young of the foster birds are reared. In 1870, I met with a case in point; the nest contained two eggs of the Hedge Accentor, and one of the Cuckoo; after a day or two the Accentors were hatched. I continued to watch for several days, in the hope that the Cuckoo's egg would also be hatched, but it proved to be addled. The parents fed their little brood with great attention, and neither they nor the young took any notice of the unhatched egg, which lay sometimes above and sometimes below the nestlings.

On another occasion I watched two Accentors feeding a young Cuckoo, which was so large that it completely filled the nest. The foster parents were most assiduous, bringing every five or seven minutes a mouthful of insects, and occasionally a large caterpillar. It was amusing to note the actions of the young Cuckoo when I approached the nest; it spread out its wings, set up its feathers, and opened to its greatest extent its wide mouth, making all the while a peculiar noise in the most defiant manner. I offered the little creature tempting caterpillars, but it would not take one. The Cuckoo is quite naked when first hatched, and has not even any down in the young state.

23. OXYLOPHUS, *Swainson.*

6. Great Spotted Cuckoo. O. glandarius, *Linnæus.*

Cuculus glandarius, Yarrell, Hist. Brit. Birds, Ed. 2, II., 200.

Oxylophus ,, Gould, Birds of Great Britain, Part XX.

A specimen of this extremely rare visitant was shot near Bellingham, North Tyne, August 5th, 1870, and was kindly presented to the Newcastle Museum by W. H. Charlton, Esq., Hesleyside.

Yarrell mentions the occurrence of an individual of this species, in 1843, in Ireland. These two are, I believe, the only examples that have been captured in the British Islands.

Family. CORACIADIDÆ, *Bonaparte.*

24. CORACIAS, *Linnæus.*

7. Roller. C. garrula, *Linnæus.*

Coracias garrula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 93.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 211.

This rare casual visitant has been taken several times in the district. Mr. Selby mentions in his catalogue the occurrence of three, and I have to record other four captures. Some years ago a specimen was shot near Earsdon; another fine individual was killed June 26th, 1847, on the estate of J. T. Wharton, Esq., near Redcar, and is in my possession; the third example was shot at Eslington, September, 1868, and is in the collection at Ravensworth Castle; the fourth was shot on the Hunwick Estate, Durham, on May the 25th or 26th, 1872, by Mr. H. Gornall, Bishop Auckland, and was kindly presented to me by him.

Family. MEROPIDÆ, *Vigors.*

25. MEROPS, *Linnæus.*

8. Blue-tailed Bee-eater. M. Phillipensis, *Linnæus.*

Merops Phillipensis, Jerdon, Birds of India, I., 207.

A fine specimen of this species was kindly submitted to me by the Rev. T. M. Hicks, of Newburn, in whose possession it now is. It was shot near the Snook, Seaton Carew, in August, 1862, by Mr. Thomas Hann, of Byers' Green. This bird is a very rare casual visitant, and the above example, so far as I know, is the first recorded individual killed in Britain.

In Jerdon's "Birds of India," Vol. I., p. 207, it is stated, that "this handsome Bee-eater is spread more or less over all

India and Burmah, extending to Ceylon in the South, and to the Malay peninsula and islands in the East."

It appears from Gould that there are but two species of this genus found in Europe, viz., *M. apiaster* and *M. Egyptius;* therefore, the occurrence of the present bird adds a third species to the European list.

Family. ALCEDINIDÆ, *Bonaparte.*

26. ALCEDO, *Linnæus.*

9. Kingfisher. A. ispida, *Linnæus.*

Alcedo ispida, Bewick, Hist. Brit. Birds, Ed. 1847, I., 293.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 223.

The Kingfisher is a resident in the district, and is not uncommon. It is mentioned, in Mr. Selby's catalogue, as breeding regularly near Mitford and Angerton, on the Wansbeck. And, according to the same authority, the nest has been taken on the banks of the Wear, near Chester-le-Street. In 1870, it bred at Stocksfield, and also at Winlaton Mill, on the Derwent. It also breeds by the Skerne near Darlington, and near Bishop Auckland, and in other localities in the county of Durham. It visits Jesmond Dene every autumn, and may be seen on most of the Northumbrian streams.

It breeds annually in a hole in a bank by the edge of the lake in the grounds at Oatlands, Surrey, the residence of Mr. W. C. Hewitson, where, I am informed by my friend, two broods are reared annually, and that one year he believes there were three. I had an opportunity, in this locality, of watching the parents feeding their nestlings. I concealed myself in the bushes, where I commanded a good view of the entrance to the nest, and found that one or other of the parents came every four or five minutes with a small fish carried crosswise in the bill. I saw this repeated seven times, when I was discovered by the old birds, and not another fish was brought during the time that I remained on the spot watching, nearly half an hour.

On another occasion, hearing a Kingfisher utter a peculiar cry

in the same locality, and thinking that a nest was not far off, I again concealed myself amidst the foliage. I had not watched long before I saw the bird with rapid, fluttering wings, poised in the air, about thirty feet above the water; the body was at an angle of about forty-five degrees, the tail downwards; in a few seconds the body gradually became horizontal, and then, as if turning on a pivot, the head was pointed in the direction of the water, and in an instant the bird shot down to the surface: it did not however succeed in capturing a fish. It made another unsuccessful attempt, exactly in the same manner, and then disappeared behind some bushes, but, in the course of a minute or two returned, carrying a fish, which it bore off to some roots of an alder tree overhanging the bank, where probably its nest was concealed.

This very pretty method of fishing does not appear to have been noticed by ornithologists; at least the Kingfisher is usually described as taking its prey by dropping headlong into the water from some overhanging branch or twig, or other elevated position. This method of fishing I have also frequently witnessed.

Family. CERTHIIDÆ, *Bonaparte.*

27. SITTA, *Linnæus.*

10. Nuthatch. S. Europæa, *Linnæus.*

Sitta Europæa, Bewick, Hist. Brit. Birds, Ed. 1847, I., 285.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 183.

I know of no instance of the occurrence of this bird in Northumberland. Thirty or forty years ago it bred regularly in the Bishop's Park at Bishop Auckland, but it is no longer to be found there. It is now a rare casual visitant.

28. CERTHIA, *Linnæus.*

11. Creeper. C. familiaris, *Linnæus.*

Certhia familiaris, Bewick, Hist. Brit. Birds, Ed. 1847, I., 287.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 165.

To be found throughout the district wherever wood prevails. A resident.

Family. UPUPIDÆ, *Bonaparte.*

29. UPUPA, *Linnæus.*

12. Hoopoe. U. epops, *Linnæus.*

Upupa epops, Bewick, Hist. Brit. Birds, Ed. 1847, I., 289.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 175.

The Hoopoe is a casual visitant. It most frequently occurs on the coast. Seven entries of the capture of this beautiful bird are recorded in my journal.

A fine example, in my collection, was shot at Cullercoats, September 8th, 1831. As it was only winged, I had an opportunity of seeing it alive, and of observing how the feathers of the crest are arranged when erected. The coronal plumes are seldom faithfully represented in ornithological works; they are usually delineated in a more or less disordered condition; but in nature they are arranged regularly in transverse pairs, increasing in length towards the middle of the crest, and radiating from the top of the head like the rays of a fan; the pairs are alternately long and short; when raised and fully displayed the arched margin of the crest is deeply and regularly indented, and is enriched with a double row of black spots—an upper row at the tips of the taller feathers, and a lower row at the tips of the shorter feathers.

Family. CORVIDÆ, *Leach.*

30. CORVUS, *Linnæus.*

13. Raven. C. corax, *Linnæus.*

Corvus corax, Bewick, Hist. Brit. Birds, Ed. 1847, I., 72.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 61.

A resident. This weird and majestic bird is now nearly banished from the two counties, where it once gave interest and life to the wild and rocky solitudes of the uncultivated parts, and where it constantly bred and reared its sable offspring. It occasionally nests in the crags at Little Whickhope, North Tyne, as I am informed by John Coppin, Esq. The same gentleman has,

under date August 5th, 1873, kindly given me the following additional information. "I have great pleasure in informing you that a pair of Ravens built their nest and reared their young this spring on the Kielder Estate, the property of the Duke of Northumberland. I heard this from our gamekeeper, at Whickhope, a few days ago, who also said that a pair occasionally builds a nest, near Chattlehope Spout, on the Reedwater. The Ravens did not build at Whickhope this spring, although they were sometimes seen about their usual haunting place." I am also indebted to Mr. Lebour for the information, that a nest or two may yet be seen at Raven's Cleugh, near Alwinton, on the Coquet.

In the latter part of the last century a Raven annually built its nest in the steeple of St. Nicholas' Church, Newcastle. I received this information from the late Mr. R. R. Wingate, who possessed an egg taken from a nest in the steeple. When a youth, he saw the old birds pass in and out of the hole in which the nest was placed.

14. Carrion Crow. C. corone, *Linnæus.*

Corvus corone, Bewick, Hist. Brit. Birds, Ed. 1847, I., 74.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 78.

This, like the Raven, is a resident, but it is rapidly disappearing under the persecution of the game-preservers, to whom I would earnestly recommend the perusal of the article on this Crow in Waterton's "Essays on Natural History." In wooded districts, nevertheless, the croak of this bird may still occasionally be heard, and the nest met with.

15. Hooded Crow. C. cornix, *Linnæus.*

Corvus cornix, Bewick, Hist Brit. Birds, Ed. 1847, I., 76.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 82.

A common winter visitant. It is seen everywhere in October, most frequently on our sea shores, and by the margins of our rivers.

Notwithstanding the apparent distinctness of this species, it

is probably a mere race of the Carrion Crow, as has been pointed out by several distinguished ornithologists. The two forms readily breed together. Mr. Yarrell mentions three or four instances of their having done so both in England and Scotland; but it is in the latter country where this intercourse most frequently takes place. The Hooded Crow being a migrant in England, it is only when some accidental circumstance detains it here that the two forms can be associated during the breeding season. In the northern parts of Scotland however both are stationary, and there every year they very often breed together.

In the spring of 1850, I had an opportunity of observing the habits of these birds in the neighbourhood of Elgin; both birds are there plentiful, and they are about equally abundant, and breed indiscriminately. The black and the grey form just as frequently paired together as two of the black or two of the grey; and some of the young from the same nest were black like the Carrion Crow, and others grey like the Hooded Crow; while some partook of the characters of both parents, the grey colour being reduced in quantity and irregularly disposed. One nest, which I met with at Elgin, had three in the brood entirely black, the other two black and grey. In that neighbourhood the mixed varieties are quite as common as the pure forms; some are almost full black, with only a slight admixture of grey on the back or shoulders; others are more or less grey below and entirely black above; indeed no two seem to be exactly alike. Of two examples that I shot, one might have passed for a Carrion Crow, it was so uniformly black, there being only a very little grey on the under parts of the body, the other had a considerable patch of grey on the chest, but it graduated on all sides into the black. In this case, as in many others, the central parts of the feathers were black, the margins grey; and towards the boundaries of the patch the central black portion increased, and thus the grey became blended and lost definition. The dark specimen proved on dissection to be a female, the grey one to be a male. The female was evidently a breeding bird. The reproductive organs in both cases were in a perfectly healthy and fully developed state, and in no way resembled those of hybrids.

In the district where this intermingling of the two forms occurs, the inhabitants look upon them as mere varieties of the Hooded Crow. Mr. Charles St. John, in his interesting work on "Natural History and Sport in Moray," says, "Though the Carrion Crow is not supposed to be an inhabitant of this part of the country, (speaking of the neighbourhood of Elgin,) it is impossible to decide upon the line which divides the two birds, the black Carrion and the Hooded Crow. No doubt the Hooded Crow is the commonest species here, but I have taken some trouble in examining these birds, and have killed Crows in every shade of plumage from pure black to the perfectly marked Hooded Crow, and this without reference to age or sex." This author then goes on to say, that "the Hooded Crow is the Crow of that country," and evidently looks upon the black individuals as mere varieties.

The same indiscriminate interbreeding of these two forms takes place in Aberdeenshire. The late Mr. J. Hepburn kindly sent to me the "Notes of his observations" on the subject, made a few miles north of Aberdeen, on the estate of his relative, Sir James D. K. Elphinstone, with liberty to make what use of them I pleased. Mr. Hepburn says, "Every one acquainted with those parts of Scotland where the Carrion Crow and Hooded Crow are to be found in about equal numbers, must often have observed in the fields, during the early spring, individuals of the one kind associated with those of the other. In fact, when at that time you see a pair of Crows, it is just as common to find that one is grey and the other black, as that both are of the same colour. The gamekeepers and persons of that description have no doubt whatever as to both the black and the grey 'Hoodies,' as they are there called, being of the same species."

This gentleman examined twelve nests, and found that the parents of five of them were, the one black the other grey, that of four, both parents were grey, and that of three, both parents were black. The broods of the black and grey parents were found, some to resemble one parent, some the other; and in one instance, where the parents were both Hooded Crows, one of the young was of a pure black, and all the rest were, like the parents, grey.

Mr. Selby, in his address to the Berwickshire Naturalists' Club, in September, 1834, after mentioning that a Hooded Crow had, in the previous spring, paired with a Carrion Crow at Fowberry, goes on to state, that examples of a similar nature "have also been known to occur in Dumfriesshire by our distinguished colleague, Sir William Jardine." And Temminck remarks, that in the northern countries of Europe, where the *C. corone* is rare, a mixed breed is sometimes produced between it and the *C. cornix*.

In Forfarshire, likewise, these two birds have been known to breed together. Indeed, it would appear, that wherever these so-called species occur together in spring they freely pair. Baron De Selys-Longchamps, in his "Notes on various Birds observed in the Italian Museums in 1866," recently published in the "Ibis," states that Salvadori "made me remark that *Corvus cornix*, which breeds on the coast of Liguria, seems to be derived from *C. corone*. Specimens are often black, with grey on the breast only; others have grey on the back, but the upper and lower tail coverts are black. In Sardinia, on the contrary, the *C. cornix* resembles the light grey of northern Europe, which winters in Belgium."

Specimens, showing this intermixture, seem not to be uncommonly found scattered about.

Degland and Gerbe state, that varieties of the Hooded Crow are sometimes nearly black. I have in my possession an individual all black, with the exception of a grey band across the breast. It was killed near Richmond, Yorkshire.

The fact of this extensive interbreeding of the Carrion and Hooded Crow is very interesting, and is assuredly contrary to analogy. Hybridism is not uncommon in the animal kingdom as an exceptional occurrence; but I know of no other instance of such a constant unhesitating union of two so-called species as is here exhibited. Whenever these two forms associate together in spring they seem habitually to pair, showing no special preference for partners of their own colour. And it is impossible, with such information as we have before us, not to question the specific value of these two reputedly distinct forms: surely they must be mere races of the same species. The mongrels seem to breed

as freely as their parents, and their reproductive organs exhibit no deterioration. Is this a case, then, where a physiological difficulty to Darwinism is surmounted? or is it a mere case of the intermingling of races or varieties, the progeny of which mixture reverts to the one form or the other of the parents? The black individual mentioned by Mr. Hepburn, in the brood of two grey birds or Hooded Crows, would appear to point to such being the fact.

The only character distinguishing the Hooded from the Carrion Crow is the grey colour of the back and belly of the former; in form, size, and proportions they perfectly agree; the habits are very similar, and the nest and eggs are undistinguishable. In fact, it would seem that the Hooded Crow is a northern, the Carrion Crow a southern race of one and the same species. And that at the boundary line, where the two races meet, they pair freely together and breed without the least reluctance. The northern form migrates in winter southwards, and considerably overlaps the boundary line, and flits again in spring, a few individuals occasionally remaining and pairing with their southern kindred, as, for instance, the Scarborough example mentioned by Yarrell. A solitary occurrence of the same kind in Northumberland came to my knowledge some years ago. There is nothing extraordinary in this; for many species of birds of partially migratory habits do the same; that is, while some individuals remain in the country to breed, others leave to do so in their northern haunts. The Woodcock is a notable example of this fact; the Crossbill, Short-eared Owl, Siskin, Lark, Golden-crested Wren, Ruff, and many others do so likewise.

16. Rook. C. frugilegus, *Linnæus.*

Corvus frugilegus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 78.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 91.

There is scarcely anywhere a well wooded domain in the two counties without its rookery; indeed, it almost seems that this resident species is increasing since its natural check, the larger birds of prey, have been removed.

Some years ago there were three or four rookeries in Newcastle: one was in the close near the Tyne Bridge, another was in a large willow in the Vicarage garden, Westgate Street. This tree was blown down in 1816, but the Crows had nearly all deserted it the previous year. A third was in existence within the last twenty or thirty years, in a small clump of trees in the grounds of a house in Percy Street, still called the Crow Trees. These trees one after another decayed, and as they died out, the colony gradually took possession of two or three large ash trees on the opposite side of the street in St. Thomas's Churchyard. I have counted as many as sixteen nests in these trees; but, alas! the unfortunate Rooks were not allowed to rest in peace, though so near to the church, and within its fence. No street arab could pass the clustering nests without having a "shy" at them with a stone. The nests in the course of a few years were reduced to two or three, and soon afterwards, the birds being ruthlessly persecuted and their nests destroyed, entirely disappeared. This happened in 1866, and thus terminated the last rookery in Newcastle.

The rookery in the Close had in like manner long been reduced to a single tree, which at length became so crowded with nests that there was no room for more, so the increasing birds had to seek accommodation elsewhere; and a pair, so pressed, built their nest for several years on the top of the weather cock of the Old Exchange house on the Sandhill, one of the most crowded parts of the town, and here broods were reared from 1783 till 1788. An account of this strange nesting place of the Rook is given in Syke's "Local Records." Mr. James Clephan has called my attention to a concise description of the rookeries in Newcastle, which appeared in the "Newcastle Chronicle," May 28th, 1864.

The Rook, like all other birds, is liable to vary in plumage; it is occasionally pied irregularly with white, sometimes an entirely white individual will make its appearance. There is one of this latter variety in the Newcastle Museum. But a variety of much greater interest has occurred in our neighbourhood, and is in my collection. It is figured on Plate III., and is a young

bird from the nest, with the feathers only partially developed; the whole of the plumage is black, each feather having a greyish bar close to the extremity; on the under parts of the body the bars are narrow, but on the upper parts they are wide and very conspicuous; the quills are likewise found marked in the same manner, and the tail feathers show slight indications of similar bars. This marking is quite symmetrical, and suggests the appearance of the spotting of the first or nest plumage so general in the *Passeres*. I have seen two more individuals of this interesting variety; they are, like my specimen, both birds from the nest, and consequently in the first plumage. In the "Ornithologie Européenne" of Degland and Gerbe it is stated, that "this species is found sometimes with the extremities of the secondary quills, the little and middle coverts marked with whitish spots (collection Degland)." And in Yarrell's "British Birds," a variety is described "of a light ash colour most beautifully mottled all over with black, and the quill and tail feathers elegantly barred." It is evident that this individual is only a more strongly marked example of the spotted variety above mentioned; and it is interesting to observe that it was also in the nest plumage; at least such is probably the case, for it is further stated that, on moulting, the bird lost "all its mottled plumage" and "became a jet black Rook."

I know of no instance of an adult bird exhibiting this variety of plumage. All the three that I have seen were in the first plumage, and this would seem to be the case with the bird mentioned by Yarrell. Thus the first plumage of this uniformly black species exhibits occasionally the spotted marknge so common in the nest plumage of the *Passeres*.

17. Jackdaw. C. monedula, *Linnæus*.

Corvus monedula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 81.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 103.

A very common resident. Up to the time of the reparation of the steeple of St. Nicholas' Church, Newcastle, 1867, numerous Jackdaws built their nests regularly year after year in that

structure. A pair or two rear their young in the steeple of the Scotch Church in Blackett Street.

31. CORACIA, *Brisson.*

18. Chough. C. gracula, (*Linnæus.*)

Pyrrhocorax graculus, Bew., Hist. Brit. Birds, Ed. 1847, I., 89.

Fregilus ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 54.

The Chough must rank as a resident, as it breeds in the rocks between St. Abbs Head and Fast Castle.

A specimen in my collection was presented to me by the late Dr. Johnston, of Berwick-upon-Tweed: it was shot at Redheugh, near the place where it was breeding.

I am not aware that this species has been captured in our district; but, as it breeds so near to Northumberland, it seems only proper to make this allusion to it.

32. NUCIFRAGA, *Brisson.*

19. Nutcracker. N. caryocatactes, (*Linnæus.*)

Nucifraga caryocatactes, Bew., Hist. Brit. Birds, Ed. 1847, I., 88.

,, ,, Yarr., Hist. Brit. Birds, Ed. 2, II., 125.

In Mr. Selby's "Illustrations of British Ornithology," Vol. I., p. 368, it is stated that this rare casual visitant "was seen in Netherwitton Wood, Northumberland, in the autumn of 1819, by his coadjutor, Captain Robert Mitford, of the Royal Navy." This species is not included, however, in Mr. Selby's catalogue.

I kept a specimen of the Nutcracker in confinement for six years: it was taken on board ship off the coast of Russia, in 1847. Its habits were interesting and peculiar. It was put at first into a cage with wooden ends, but in a very short time it was seen with its head through a hole it had made in one of the ends. It was then removed into another cage, but from this it soon released itself, though the cage was composed almost entirely of wire: it broke through one of the wooden horizontal bars that held the wires in their places, squeezed itself out

between them, and, escaping into my museum, commenced without the least delay to attack the bird cases, and would soon have done much mischief had it not been immediately discovered. I was absent at the time, and its depredations could only be stopped by not allowing it to rest on any thing composed of wood. Wherever it alighted it at once commenced to test, with rapid blows of its bill, the nature of the material. It at length pitched upon a plate of Guillemot's eggs, and before it could be interrupted had smashed every one. It then attacked the bones of a bird which were awaiting articulation, and dispersed them in all directions. This was the first day's work of its domestication.

Before it could be made secure the wooden bars, and every exposed portion of the frame work of the cage, had to be covered with tin. It was extremely restless and active, and never settled when any one was present. It never became very tame, and I could never get it to look me full in the face. It always avoided my gaze by turning its head aside, as if it disliked to look directly at me. Its voice was very peculiar; it had an extremely harsh, loud cry, resembling the noise produced by a ripping saw while in full action. This cry was so loud that it could be heard all over the house. It had also a sweet, low, delicate, warbling song. This was uttered only when everything was perfectly quiet. The song was much varied, and was continued for some time. So low and delicate was it, that it could only be heard when the bird was close at hand, and the note seemed as if it were produced low down in the throat. The song was occasionally interrupted by a few low creaking notes, like those produced when a corkscrew is being used.

The Jay appears also to have a somewhat similar song. Montagu says, "Its common notes are various but harsh; it will sometimes in the spring utter a song in a soft and pleasing manner, but so low as not to be heard at any distance."

33. PICA, *Brisson.*

20. Magpie. P. caudata, *Linnæus.*

Garrulus picus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 83.

Pica caudata, Yarrell, Hist. Brit. Birds, Ed. 2, II., 109.

This beautiful resident species, once so abundant in the district, has now almost disappeared from the neighbourhood of Newcastle, and has everywhere become rare.

Dr. Embleton informs me that he has heard a Magpie in confinement, when alone, giving utterance to a low sweet warbling song like that which has been mentioned as belonging to the Nutcracker and the Jay.

34. GARRULUS, *Brisson.*

21. Jay. G. glandarius, (*Linnæus.*)

Garrulus glandarius, Bew., Hist. Brit. Birds, Ed. 1847, I., 85.

,, ,, Yarr., Hist. Brit. Birds, Ed. 2, II., 119.

The Jay has shared the fate of the Magpie, and is now nearly annihilated in the two counties, where a few years ago it was by no means uncommon, and was frequently seen in troops, composed of the parents and their nestlings, passing through our woods, uttering their wild, harsh cry. It is a constant resident.

In a wooded district west of Newcastle, where this species is still to be found, I am informed that one gamekeeper destroyed twenty-five individuals of this beautiful bird in 1872.

Family. LANIIDÆ, *Bonaparte.*

35. LANIUS, *Linnæus.*

22. Ash-coloured Shrike. L. excubitor, *Linnæus.*

Lanius excubitor, Bewick, Hist. Brit. Birds, Ed. 1847, I., 108.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 156.

This is a rare winter migrant. Three or four specimens in my collection were shot in the district, and I know of several other captures.

23. Woodchat. L. rufus, *Brisson.*

Lanius rufus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 110.

,, *rutilus*, Yarrell, Hist. Brit. Birds, Ed. 2, I., 167.

A specimen of this rare casual visitant was shot near Bamborough on April 29th, 1859, and is in the possession of Henry Cresswell, Esq., of Cresswell Tower.

24. Red-backed Shrike. L. collurio, *Linnæus.*

Lanius collurio, Bewick, Hist. Brit. Birds, Ed. 1847, I., 112.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 161.

A rare casual visitant. Two specimens were killed, near Kenton, on the Newcastle Town Moor, in the summer of 1829. These are mentioned in Mr. Selby's catalogue, and are now in my collection. Another example, also in my collection, was shot at Horsley, Northumberland, May, 1834.

Bewick's figure of the female represents the young in the first plumage.

Family. STURNIDÆ, *Vigors.*

36. STURNUS, *Linnæus.*

25. Starling. S. vulgaris, *Linnæus.*

Sturnus vulgaris, Bewick, Hist. Brit. Birds, Ed. 1847, I., 98.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 40.

A resident. Common everywhere, and breeds in Newcastle amidst the chimneys of the houses. A few years ago it was not by any means numerous.

The rapid increase of this species is undoubtedly owing to the destruction of the birds of prey, and shows with what speed man's interference with nature may affect its balance for good or for evil.

I have often heard our late celebrated townsman, Thomas Bewick, say, how delighted he should be if a Starling could be induced to come and build its nest in his house. Were he alive now, his wish might easily be attained. To induce this species

to take up its abode with you it is only necessary to provide suitable accommodation. All that is needful is to place a small box with a suitable hole in it at one end, anywhere on the outer walls of the house, out of the reach of cats. A spring or two ago I so placed three boxes on the house of a friend of mine, and before many hours had elapsed all were taken possession of by Starlings, though they had a struggle for them with the Sparrows. This plan is adopted in Denmark, where the bird is a great favourite.

37. PASTOR, *Temminck.*

26. Rose-coloured Starling. P. roseus, (*Linnæus.*)

Pastor roseus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 102.

„ „ Yarrell, Hist. Brit. Birds, Ed. 2, II., 48.

This is a rare casual visitant. Mr. Selby mentions in his catalogue the occurrence of four specimens in the district; and I have to notice the capture of several others.

An adult female was taken on the 31st of July, 1832, at Rock, Northumberland, where it was seen for several days feeding on strawberries in Mr. Smith's garden, before that gentleman shot it. I am indebted to Mr. Smith for the specimen which is in my collection. I am informed, by Mr. W. Proctor, that another example was shot near Durham in the same year. On the 25th of July, 1855, a fine male specimen, which I purchased of a poulterer on the following day, was shot at Elswick, near Newcastle. On the 15th of September, 1856, another male specimen was shot at the Black Fell, Gateshead, and this is also in my collection. In July of the same year a third example was killed at Whitburn, by Sir Hedworth Williamson's gamekeeper. Thomas Wilson, Esq., of Shotley Hall, Durham, shot in that neighbourhood, in 1860, a fine specimen, out of a flock of Starlings. In August, 1868, an example was caught alive at Cresswell, Northumberland. Others have occurred, but it seems unnecessary to make further allusion to them.

I possess a good series of specimens of this beautiful bird, from India and elsewhere, which, with those captured in England, show very distinctly that the clearness of the rose colour is very much

owing to the abrasion of the margin of the feathers. Freshly moulted individuals are always, above and below, of a soiled rosy hue, the basal portion of the feathers being of a clear rose colour, and their margins widely fringed with Isabella or snuff-brown colour; the marginal portions are, to a great extent, of an obscure rosy tint; and it is not till this brown portion gets worn off that the rosy colour is revealed in all its beauty. This is also the case with the black of the head, crest, throat, neck, and upper parts of the breast; all the feathers of these parts, when fresh, being margined with warm grey, become of a glossy black after the margins have been removed.

The change thus produced in the colour not having been taken fully into account, has led to the belief that this beautiful bird has two or three distinct changes of plumage; while it really attains its mature plumage on the first moult. At least, fine fresh specimens in my possession, which agree well with Degland and Gerbe's description of the young after the first moult, could in a very short time, with the aid of a pair of scissors, be made to assume the rosy tint and fine glossy black of the breeding birds.

The adult male, after the moult, represented by the upper figure (Plate IV.), has the feathers of the head, crest, neck, and upper parts of the breast purplish black, strongly edged with greyish white, giving to these parts a hoary tint; the coverts of the wings, quills, and tail-feathers are black, reflecting greenish blue, and are narrowly margined with grey; the back, rump, and scapulars are of a delicate rose colour, with each feather broadly tipped with Isabella brown, obscuring to a great extent the rose colour of the basal portion, and giving to these parts a soiled appearance; the breast, flanks, and belly are of a delicate rose colour, considerably obscured, in like manner, by the colour of the margins of the feathers, which, being of a much paler brown, particularly towards the centre of the breast, the rosy hue has more a faded than a soiled appearance; the thighs have their feathers black, edged with grey.

The adult female, after the moult, resembles the male in every particular, but the tints are less vivid, and the crest is smaller

The adult male and female during the breeding season, the margins of the feathers having been removed by abrasion, have the head, crest, neck, and upper part of the breast of a pure glossy black reflecting purple; the wing coverts, quills, tail feathers, under tail coverts, and thighs glossy black, with bluish green reflections. The basal half of the mandible is black.

The young, before the moult, are of an Isabella brown colour, somewhat paler on the under parts. The lowest figure (Plate IV.) represents the young. After the first moult they resemble the freshly moulted adults, but are less brilliant in colour, and the crest is smaller.

Immediately after the autumnal moult the young and the adult are scarcely distinguishable; at this time the obscuration of the beautiful tints of the breeding season is greatest. The abrasion of the margins of the feathers then at once commences, and, before the nesting time arrives, the beauty of the plumage is fully developed. The middle figure (Plate IV.) represents the adult male in this state of plumage.

Mr. Jerdon, in his work on "The Birds of India," says, that the Rose-coloured Starling makes its appearance in the Peninsula about the end of November, or beginning of December, and disappears in March, and remarks, that the majority of the birds in a flock are in an immature plumage of a dirty fawn colour. This is just what might be expected, only the birds are not immature, but, having recently moulted, the margins of the feathers are as yet to a great extent retained; hence the "dirty fawn colour." This view of the case is confirmed by what the Marquis Oratio Antinore says in his interesting account of this species, in a paper translated by Dr. Sclater, in the "Zoologist" for 1856.

According to this authority, the breeding time of the Rose-coloured Starling is June and July, and as the moult does not take place till after this season, it is evident that the new feathers could not be much worn at the time mentioned by Jerdon, namely, from December to March. The Marquis further states, that on the 26th of May, "about sun-rise, great numbers of these birds were settling so closely packed upon the trees as to make them look as if they were all covered with red roses." The feathers

by this time had lost their brown margins, and the birds appeared in their complete nuptial dress.

When the Rose-coloured Starlings arrive in England they all, more or less, retain this dress: two of the most beautiful rosy specimens in my collection were taken in this district in July. Those that arrive so early as this have not commenced to moult, and hence are exceedingly pure in their tints. My freshest feathered individuals, which are from India, have both the black and rose colour much obscured by the marginal tints.

The Rose-coloured Starling is undoubtedly closely allied to the Common Starling. This alliance is seen in its general habits, and in the character of its nest and eggs. It is also seen in the pale tips of the feathers of the head, crest, neck, and breast of the adult, before their change by abrasion; so likewise of the feathers of the lesser wing coverts, each of which has a pale spot at the extremity. The nest plumage, too, is exceedingly like that of the Common Starling.

Family. FRINGILLIDÆ, *Vigors.*

38. PASSER, *Brisson.*

27. House Sparrow. P. domesticus, *Brisson.*

Fringilla domestica, Bewick, Hist. Brit. Birds, Ed. 1847, I., 245.

Passer domesticus, Yarrell, Hist. Brit. Birds, Ed. 2, I., 521.

This very common resident is almost everywhere associated with the dwellings of man, but is rare in wild and elevated situations.

The Sparrow is a most valuable bird to the agriculturist, though its services are but little appreciated by him. It feeds its young almost exclusively on insects and their larvæ.

A few years ago I watched, for some time, a pair of Sparrows feeding their young. The parents returned every four or five minutes with a mouthful of insects. Supposing that at each time six insects were brought, and this action were continued for twelve hours a day for three weeks, a single brood of Sparrows

would consume eighteen thousand one hundred and forty-four insects or larvæ of insects. But as this estimate is low, the number of insects consumed may safely be set down at twenty thousand at least; and it must not be forgotten that the Sparrow breeds at least three or four times in the year.

How prodigious, therefore, must be the number consumed by all the broods of a district like ours! And, again, if we consider the influence, according to the above calculation, which all the hosts of Sparrows in the British Islands must exercise in keeping in check the development of insect life, we must allow that the existence of the Sparrow is really a matter of vast national importance.

Undoubtedly the Sparrow takes grain when he can get it, which is only during the time of harvesting, but our sociable little friend ought to be credited with devouring also the seeds of weeds, and thus materially assisting in keeping the land clean.

28. Tree Sparrow. P. montanus, *Brisson.*

Fringilla montana, Bewick, Hist. Brit. Birds, Ed. 1847, I., 248.

Passer montanus, Yarrell, Hist. Brit. Birds, Ed. 2, I., 516.

The Tree, or, as it is not unfrequently called, the Mountain Sparrow, breeds in both counties, and is a constant resident. It is a far more retired bird than its congener, and is very local and much rarer. I know of only three or four places where it breeds in our district, namely, Elswick, near Newcastle, Whitley, two or three miles north of Tynemouth, Whitburn, a little north of Sunderland, and in the neighbourhood of Durham. I have never found it nesting in trees, but frequently in holes, and under the coping stones of old garden walls. Mr. Frederick Raine informs me, however, that he has taken three nests of this species in holes of the trunks of old dead trees in the neighbourhood of Durham.

The first specimen I obtained was killed at the Rabbit Banks, Gateshead, about the year 1831. This is the example alluded to in Selby's catalogue, and was the first ever taken in the district.

39. PYRRHULA, *Brisson*

29. Bullfinch. P. vulgaris, *Temminck.*

Pyrrhula vulgaris, Bewick, Hist. Brit. Birds, Ed. 1847, I., 238.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 574.

A constant resident in both counties, but not very abundant anywhere.

White, pied, and pale-rose coloured varieties occasionally occur. Specimens of the two former are in the collection of Dr. Charlton, Newcastle, and a fine specimen of the latter is in the Newcastle Museum. When kept in confinement the colour of the Bullfinch is liable to be affected by its food: if fed on hempseed it very soon becomes entirely black.

40. CORYTHUS, *G. Cuvier.*

30. Pine Grosbeak. C. enucleator, (*Linnæus.*)

Pyrrhula enucleator, Bewick, Hist. Brit. Birds, Ed. 1847, I., 236.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 581.

A casual visitant. It is stated in Selby's catalogue, that a "specimen of this rare British species, now in the possession of Mr. Anthony Clapham, was shot at Bill Quay, near Newcastle."

41. LOXIA, *Brisson.*

31. Crossbill. L. curvirostra, *Linnæus.*

Loxia curvirostra, Bewick, Hist. Brit. Birds, Ed. 1847, I., 233.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 1.

A resident. This interesting species sometimes appears in considerable numbers, during winter, in our fir plantations, feeding on the seeds of the fir cones; and at other times not a single individual is to be seen throughout the whole winter months. Occasionally a few pairs remain with us during the summer to breed, though most of the individuals are migratory; it ought therefore to be considered a resident, as on such occasions it must be in our district the whole year.

I know of three instances of the Crossbill nesting in our district. A nest with the young was found, at Hesleyside, on the 15th of July, 1838. Both the parent birds and the young were shot on their leaving the nest: one of the latter is in my possession, and has the bill, as is known to be the case with nestlings, scarcely at all crossed. The second nest was taken in 1856, near Crawcrook, Durham. Mr. Thomas Grundy, gamekeeper and woodman at Bradley, found it, and informed me that it was discovered on the 24th of February, before it was completely built. On the 1st of March there were three eggs in it, which had been incubated for some days. It was near the top of an old spruce fir, resting upon a branch at a distance of about eighteen inches from the bole. This specimen, with the eggs, forms part of my series of this species. In 1869, the third nest was taken, between Riding Mill and Slaley, Northumberland, as I am informed by Mr. Isaac Clark: the young were hatched.

The Crossbill builds annually in the northern parts of Scotland. The late Mr. Charles St. John and I took the nest of it on the 8th of May, 1850, in Dulsie Woods, near the Findhorn. The young had flown, but we saw the parent birds close by, feeding them. This nest was not more than five feet from the ground, on a horizontal branch of a fine old spreading Scotch fir. We saw, at the same time, a second nest, and the remains of several others. But it was not until 1854 that I obtained the nest and eggs, when one was taken on the 10th of March, with four eggs, in Balnagowan Woods, Rosshire, by McDonald, a faithful and much respected servant of Mr. St. John's. I believe this to be the first time the nest and full complement of eggs had been procured in the British Islands. Since then, I have received numerous nests and eggs from Rosshire.

The number of eggs is usually four: in one instance I have seen five. This species is a very early breeder, February, March, and April being the usual time. The nest is generally placed on a horizontal branch at various elevations, sometimes as high as thirty or forty feet, not unfrequently quite low, being only five or ten feet from the ground. In close woods where the lower branches have all fallen, the nests, from necessity, are

placed high up; but when the trees have plenty of room, and consequently retain the lower branches, the birds not unfrequently prefer them for their nesting places.

On the first moult both sexes attain their adult plumage, which in the male is red, in the female green. The male afterwards gradually becomes green like the female, but somewhat brighter, and in parts inclined to a golden hue, particularly on the rump. This is easily proved in cage birds. I requested my collector to note the colour of the parent birds of each nest, and it appears that in the greater number of cases one of them was green, and the other red; but it frequently happened that both parents were green. In thirteen cases nine were red and green respectively, in four both male and female were green. It was to be expected that red males would predominate, as this is the livery of the younger breeding birds. This fact of the change of plumage I had determined, years before, by noticing what took place in cage birds.

Some of the Scotch-bred specimens are quite as large as the so-called Parrot Crossbill from Sweden and Norway; and in size the two forms imperceptibly graduate into each other: the same is the case with their eggs. Indeed I can find no character, either in the bird, nest, or egg, to distinguish the one from the other.

32. White-winged Crossbill. L. bifasciata, (*Brehm.*)

Loxia leucoptera, Yarrell, Hist. Brit. Birds, Ed. 2, II., 28.

,, *bifasciata*, Gould, Birds of Great Britain, Part V.

A female of this casual visitant was shot out of a flock of about fifteen, near Brampton, Cumberland, November, 1845: this specimen is in my possession. Two or three others were killed at the same time and place. This species ought not in strictness to be included in our list; but its place of capture is so close to the borders of Northumberland, that it would scarcely be right to exclude all notice of it. The flock, in all probability, may have just passed out of the county, and in a few minutes afterwards might have returned to it again.

42. COCCOTHRAUSTES, *Brisson.*

33. Hawfinch. C. vulgaris, *Vieillot.*

Fringilla coccothraustes, Bewick, Hist. Brit. Birds, Ed. 1847, I., 241.

Coccothraustes vulgaris, Yarrell, Hist. Brit. Birds, Ed. 2, I., 531.

This is a rare casual visitant. Selby states in his catalogue, that "a few years ago he saw one at Alnwick Castle, which was killed at Hulne Abbey," and that "two specimens were some time ago shot near Stockton-upon-Tees."

I have three examples which were shot in Streatham Park: one many years since, and two, a male and female, in the winter of 1837. Several specimens were seen near Belsay Castle, in 1860 and 1862. In the former year three of them were shot, and one taken alive. This beautiful species is not known to have bred in either county.

43. LIGURINUS, *Koch.*

34. Greenfinch. L. chloris, (*Linnæus.*)

Fringilla chloris, Bewick, Hist. Brit. Birds, Ed. 1847, I., 243.

Coccothraustes chloris, Yarrell, Hist. Brit. Birds, Ed. 2, I., 527.

A common resident species, associating with Chaffinches, Sparrows, and other small birds, and appearing in large flocks.

44. FRINGILLA, *Linnæus.*

35. Chaffinch. F. cælebs, *Linnæus.*

Fringilla cælebs, Bewick, Hist. Brit. Birds, Ed. 1847, I., 249.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 507.

A resident, and probably the most abundant bird in the district, and certainly one of the most beautiful.

36. Mountain Finch. F. montifringilla, *Linnæus.*

Fringilla montifringilla, Bewick, Hist. Brit. Birds, Ed. 1847, I., 251.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 512.

A winter visitant, and frequently occurring in considerable numbers, preferring the neighbourhood of beech trees.

The summer plumage of this species differs considerably from that of the winter. This change is in consequence of the pale margins of the feathers being worn off, so that the head and back become black, which is the colour of the central part of the feathers.

45. CARDUELIS, *Brisson.*

37. Goldfinch. C. elegans, *Stephens.*

Fring. carduelis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 265.

Carduelis elegans, Yarrell, Hist. Brit. Birds, Ed. 2, I., 538.

This must be considered as a casual visitant in our district, being met with only occasionally in autumn and winter. I have seen it only on two or three occasions.

46. CHRYSOMITRIS, *Boie.*

38. Siskin. C. spinus, (*Linnæus.*)

Fringilla spinus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 261.

Carduelis ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 544.

A resident: not uncommon during winter. On the 5th of March, 1833, I saw a flock of about thirty at Bywell on the Tyne, several of which were shot, and are in my collection. On the 6th of July, 1848, Mr. Thomas Robson met with a flock, near Swalwell, on the Derwent.

The nest of a Siskin, with four eggs, was taken by Mr. J. Dale, May 7th, 1848, near Brancepeth, Durham: it was placed near the top of a spruce fir. This is, I believe, the only instance known of the Siskin breeding in our district. It is usually a

winter or autumn visitant; but, from the above fact, it is evident that it occasionally remains in the district the whole year. It must therefore be considered a resident species.

It breeds regularly in the north of Scotland. On the 2nd of May, 1850, I took two nests of it in a large pine wood at Lochnabo, in the neighbourhood of Elgin. One was placed within two feet of the extremity of a horizontal branch, more than half way up the tree; the other occupied a similar situation in a neighbouring tree. In both the eggs were hatched; in one the young were nearly fledged. Both nests, with their inmates, are in my collection. I afterwards received numerous nests and eggs, taken in Rosshire, where the species breeds regularly every year, and is as common there as the Crossbill. The nests are as frequently in a Scotch fir as in a spruce, and are usually situated as above described.

47. CANNABINA, *Brehm.*

39. Linnet. C. linota, (*Gmelin.*)

Fring. cannabina, Bewick, Hist. Brit. Birds, Ed. 1847, I., 253.

Linota ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 550.

A common resident. This species has the breast sometimes red, sometimes grey, and consequently, a few years ago, individuals so differing were described as two species, and named respectively the Brown and Grey Linnet. When the Brown Linnet is kept in confinement it loses the red on the breast on the first moult, and never afterwards regains it, but continues in the plumage of the Grey Linnet. The fact is that the males, from shedding the nest feathers get a red breast, which they retain only during the first season; they then assume the garb of the female, which is retained for the rest of their lives, as in the case of the Crossbill. This does not seem to be generally understood by ornithologists, though the bird fancier is quite familiar with the fact that the males never regain the red on the breast after moulting. It is stated by Yarrell, that the male assumes the red breast in the breeding season. This

is not quite correct, for just as many are found breeding without the red breast as with it.

40. Mountain Linnet. C. flavirostris, (*Linnæus.*)

Fringilla montium, Bewick, Hist. Brit. Birds, Ed. 1847, I., 257.

Linota ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 569.

This, like the preceding species, is a resident, and is not uncommon, breeding on the heather in the wild uncultivated parts of both counties. I found a nest with young, in July, 1866, at Cragside, Coquetdale; and Mr. Thomas Thompson took a nest, with eggs, at Haltwhistle, in 1869.

48. LINARIA, *Vieillot.*

41. Mealy Redpole. L. borealis, *Vieillot.*

Linota canescens, Yarrell, Hist. Brit. Birds, Ed. 2, I., 556.

Linaria borealis, Degland et Gerbe, Orn. Europ., I., 293.

A common winter visitant; never found breeding in the district; occasionally appearing in large flocks.

42. Arctic Redpole. L. canescens, *Gould.*

Linaria canescens, Gould, Birds of Eur. (1833–1837), Pl. 193.

,, ,, Degland et Gerbe, Orn. Europ., I., 296.

A casual visitant. I have seen only a single example of this species; it was knocked down on the 24th of April, 1855, with a clod of earth, on the sea banks, near Whitburn, where it had been observed flying about for a few days. This specimen was given to me by the Rev. G. C. Abbs, and is now in my collection. It is represented in Plate V.

It is very beautiful, and of a pale grey or mealy appearance all over. The pale margins of the feathers are a clear white; the rump and under parts quite white, with a few obscure streaks of pale brown on the flanks. The front of the head is of a dull crimson, but there is no red elsewhere. It is undoubtedly a mature specimen, and in the winter dress. The

excessive whiteness of the plumage at once distinguishes this from its congeners.

43. Lesser Redpole. L. rufescens, *Vieillot.*

Fringilla linaria, Bewick, Hist. Brit. Birds, Ed. 1847, I., 259.

Linota ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 562.

A common resident, breeding in old, tall, neglected hedges, and in woods.

Perhaps our three species of *Linaria* ought to rank merely as races, for, with the exception of size and degree of greyness, there is no good character to distinguish them; and, indeed, in these respects, the difference is only one of degree. The Lesser Redpole has the feathers margined with a little white; the Mealy Redpole with more white, and the Arctic with most white; hence the last species is the whitest and most mealy looking; and it is likewise distinguished by the rump and belly being of a pure white, while in the other two so-called species these parts are also white, but more or less streaked with brown. In length the Lesser Redpole is rarely more than four-and-a-half inches, the Mealy Redpole five inches, and the Arctic Redpole five-and-a-half inches.

The peculiar rosy-red tints of the breast and rump of these birds remind one of the similar tints of the Crossbill, and have a stained-like appearance, rather than the usual character of the coloration. The red on the head is of a different character, the stained-like tints, too, disappear in the same mysterious manner as in the Crossbill.

The rose colour of the breast and rump does not appear to be retained for any length of time; hence, as many birds are found breeding without as with it; and it is a notorious fact that in cage specimens the rosy hues never return after the birds have moulted, as has already been noticed with respect to the Linnet. Bird fanciers, however, attribute this change to the effect of confinement, but in this they are in error, else how does it happen that so many birds are found in a wild state breeding without the rosy tints? In fact, it is with the Redpoles as with the

Crossbill, the red disappears in early life, and never afterwards returns, as has been proved by experiment in both species.

49. MILIARIA, *Brehm.*

44. Common Bunting. M. Europea, *Swainson.*

Emberiza miliaria, Bewick, Hist. Brit. Birds, Ed. 1847, I., 218.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 479.

A common resident. Breeding in meadows.

50. EMBERIZA, *Linnæus.*

45. Yellow Bunting. E. citrinella, *Linnæus.*

Ember. citrinella, Bewick, Hist. Brit. Birds, Ed. 1847, I., 216.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 490.

A resident. Common everywhere in both counties.

51. CINCHRAMUS, *Boie.*

46. Reed Bunting. C. schoeniclus, (*Linnæus.*)

Ember. schoeniclus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 220.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 484.

A common resident species. Breeding in scrubby damp situations.

52. PLECTROPHANES, *Meyer et Wolf.*

47. Snowflake. P. nivalis, (*Linnæus.*)

Emberiza nivalis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 226 and 229.

Plectrophanes nivalis, Yarrell, Hist. Brit. Birds, Ed. 2, I., 470.

A winter visitant. Occasionally abundant. It arrives on our coast, singly or in pairs, in September and October, and during the winter assembles in large flocks.

In the breeding season, the Snowflake has a very different appearance from that which it assumes while with us. The change is produced in the same manner as in the Mountain

Finch, namely, by the margins of the feathers wearing off. The change in appearance thus produced is very remarkable in this species: the head, neck, breast, and belly become quite white, while the back and scapulars are changed to pure black. The lower figure, Plate VI., represents the bird in the winter, and the upper figure in the summer dress.

48. Lapland Bunting. P. Lapponicus, (*Linnæus.*)

Plectrophanes Lapponica, Yarrell, Hist. Brit. Birds, Ed. 2, I., 465.

Centrophanes ,, Gould, Birds of Gt. Britain, Part XII.

This is a very rare casual visitant. A specimen in the Durham Museum was killed out of a flock of Snowflakes in the neighbourhood of that town, January, 1860. And a living example is at present (1873) in the possession of Mrs. Jeffries, Newcastle-on-Tyne; but how and where it was obtained is not known.

Family. ALAUDIDÆ, *Schinz.*

53. ALAUDA, *Linnæus.*

48. Skylark. A. arvensis, *Linnæus.*

Alauda arvensis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 195.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 447.

A common resident throughout the district; in autumn, considerable numbers migrate to our shores from more northern latitudes. Varieties of colour sometimes occur. In Dr. Charlton's collection there is a specimen entirely white.

50. Woodlark. A. arborea, *Linnæus.*

Alauda arborea, Bewick, Hist. Brit. Birds, Ed. 1847, I., 198.

,, ,; Yarrell, Hist. Brit. Birds, Ed. 2, I., 459.

Mr. Thomas Robson shot, near Swalwell, March, 1844, two specimens of this casual visitant, and kindly presented them to me. In Mr. Selby's Catalogue an example is mentioned as having being killed near Twizell, on the 24th of November, 1827.

54. OTOCORIS, *Bonaparte.*

51. Shore Lark. O. alpestris, (*Linnæus.*)

Alauda alpestris, Yarrell, Hist. Brit. Birds, Ed. 2, I., 440.

,, ,, Gould, Birds of Gt. Britain, Part XVIII.

The Shore Lark is a casual visitant, and is very seldom taken in our district. In June, 1851, a living specimen was bought in Newcastle market. I saw the specimen, but where it was captured is not known. Two specimens came into my possession, in 1855, which were killed near Rock Lodge, Roker, a few years before; and Mr. W. E. Brooks shot two individuals at Fenham Flats, Northumberland, on the 8th of February, 1857. These were unfortunately destroyed by rats.

In the MS. notes of the birds of Durham of Mr. J. H. Gurney, Junr., before quoted, it is stated that four specimens of the Shore Lark were shot in the county of Durham by Mr. G. C. Pecket, Junr., on the 26th of July, 1867.

Family. MOTACILLIDÆ, *Bonaparte.*

55. CORYDALLA, *Vigors.*

52. Richard's Pipit. C. Richardi, (*Vieillot.*)

Anthus Richardi, Bewick, Hist. Brit. Birds, Ed. 1847, I., 186.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 436.

Only three examples of this rare casual visitant have occurred in the district; they were all taken in Northumberland. The first was shot by Mr. Wm. Proctor, of Durham, at Howick, in February, 1832; the second was killed at Newbiggin-by-the-Sea, on the 1st of December, 1831; the third on Newcastle Town Moor, October 10th, 1845: the last two are in my collection.

56. ANTHUS, *Bechstein.*

53. Tree Pipit. A. arboreus, (*Brisson.*)

Anthus arboreus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 191.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 422.

A spring-and-autumn migrant. Plentiful in summer, breeding by the margins of woods and plantations.

54. Meadow Pipit. A. pratensis, (*Linnæus.*)

Anthus pratensis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 189.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 427.

A resident, and abundant everywhere. This species is closely related to *A. cervinus* of the continent, which some of my specimens resemble so closely, that it is almost impossible to separate them.

55. Rock Pipit. A. obscurus, (*Pennant.*)

Anthus aquaticus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 187.

,, *petrosus*, Yarrell, Hist. Brit. Birds, Ed. 2, I., 432.

A resident, breeding plentifully on our rocky sea shores, and remaining with us the whole year.

This species can scarcely be distinguished from *A. rupestris*, Nilsson, of which it is surely a mere race. Both forms occur in Sweden and in England. My specimens from Sweden, which are undoubtedly Nilsson's *A. rupestris*, differ only from *A. obscurus* by having the tints of the under parts somewhat warmer. My late friend, Mr. Wheelwright, at my request, kindly forwarded to me a number of specimens of the Swedish bird for comparison. On examination, some of these were found to be perfectly similar to our form, so that they could not be divided from it.

Through the kindness of Mr. W. E. Brooks I received, some years ago, from Chepstow, both the bird and egg of the normal Swedish form. The bird was shot April 18th, 1854, and the egg taken and most carefully verified by his friend, who says that several of these birds were seen in the same locality. From this gentleman's description of the nest, it does not appear to differ at all from that of *A. obscurus*. Its situation was precisely similar to that of some others observed in the same place; one or two of the nests were so high in the cliff that they could not be obtained.

The two so-called species graduate into each other in such a manner that it is quite impossible to divide them by the colour

of their plumage, or any other character whatever; the habits are the same; the nest and eggs are the same; and both forms are found in Sweden and in England. Then why consider them distinct species? The warm-coloured form prevails in Sweden, the less-warmly-coloured one in England, and both ought apparently to be looked upon as races. *A. obscurus* and *A. rupestris* seem to bear to each other the same relation as *A. pratensis* and *A. cervinus*.

57. BUDYTES, *G. Cuvier*.

56. Grey-headed Wagtail, B. flava, (*Linnæus*).

Motacilla neglecta, Yarrell, Hist. Brit. Birds, Ed. 2, I., 412.

Budytes flava, Gould, Birds of Gt. Britain, Part XIV.

A rare spring-and-autumn migrant. It was first taken in the district by Mr. Thos. Robson, who shot a male specimen, on the 1st of May, 1836, on Dunston Haughs, a little west of Newcastle; it was in company with another individual, which was probably a female. A notice was given of this capture in the "Mag. of Zoology and Botany," Vol. I., p. 491.

In May, 1859, I saw in the hands of Mr. Duncan, bird preserver, another male specimen, which was shot in the neighbourhood of Newcastle. Mr. Lawson, of Blaydon, took two nests of this species in the latter end of May, 1869, on Dunston Haughs: they contained five eggs each. A year or two before this date that gentleman had observed a bird in this locality, and suspected that it was nesting there. On June 13th, 1870, Mr. Joseph Watson, Junr., Gateshead, found another nest at the same place, but it had been trodden on by a horse, and the eggs were destroyed. On the 5th of July, I accompanied Mr. Watson to the spot and saw the crushed nest, and we also saw two or three young birds, of another brood, with their parents feeding them. Two of the young were shot a day or two after by Mr. Lawson, who kindly presented one of them to me. And I am indebted to Mr. Watson for a fine adult female which he shot at this place on the 21st of May, 1872.

From the above facts it would seem pretty certain that the

Grey-headed Wagtail breeds regularly in this neighbourhood, and may have done so for many years, having been mistaken for the Yellow Wagtail, *B. Rayi*, which is associated with it on Dunston Haughs, a male of which was shot by Mr. Watson on the same day that he obtained *B. flava* above alluded to.

The nests are similar to those of *B. Rayi*, and are placed in a hollow amidst the grass. The nest plumage resembles that of the Yellow Wagtail; but the grey tints are much colder, and there is scarcely a perceptible tinge of yellow on the under parts or elsewhere, as is the case with those of *B. Rayi*.

57. Ray's Wagtail. B. Rayi, *Bonaparte*.

Motacilla flava, Bewick, Hist. Brit. Birds, Ed. 1847, I., 185.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 418.

For a few years this was rather a common species in the district; but of late it has become somewhat less plentiful. It is a spring-and-autumn migrant, and breeds in both counties.

This species should, perhaps, be considered a race of *B. flava*. And indeed I am quite disposed to agree with Degland and Gerbe, who state (Ornith. Europ., p. 378) that "the *B. flava* has several local varieties which some authors have wrongly considered as distinct species. These varieties," they state, "may be reduced to the three following, namely, the *B. Rayi*, the *B. cinereocapilla*, and the *B. melanocephala*." The Baron De Selys-Longchamps also believes that *B. melanocephala* and *B. cinereocapilla* are both races of the *B. Rayi*.

The nest plumage of *B. Rayi*, and particularly that of *B. flava*, bears a strong resemblance to that of the Pipits.

58. MOTACILLA, *Linnæus*.

58. Pied Wagtail. M. Yarrellii, *Gould*.

Motacilla Yarrellii, Bewick, Hist. Brit. Birds, Ed. 1847, I., 182.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 395.

A common resident species, breeding in both counties. Only a few remain through the winter, the greater number migrate.

This is a very doubtful species, as varieties occur which seem to unite it with *M. alba*, of which it is probably a mere race.

59. Grey Wagtail. M. sulphurea, *Bechstein.*

Motacilla boarula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 184.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 407.

A resident species. Not uncommon. The greater number migrate in winter.

Family. HYDROBATA, *Degland.*

59. HYDROBATA, *Vieillot.*

60. Dipper. H. cinclus, (*Linnæus*).

Cinclus aquaticus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 134.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 181.

This interesting bird is a constant resident, delighting in our rocky burns that abound in little cascades and have lively running streams. In such sequestered situations they are sure to be found nesting, but sparingly, never more than a pair being found together: it is a solitary, retiring species.

I found, many years ago, a nest of the Dipper in the roof of a tunnel at Tanfield Dene; and I have observed it the last three years in Jesmond Dene, on one occasion during summer, but it has never been known to breed there.

This harmless frequenter of our brooks has of late been accused of devouring salmon spawn, and in some quarters has been doomed to the fate of all "vermin." A few years ago I examined specimens that were killed, because they were feeding on the spawning ground of the salmon in North Tyne, and found that their crops contained nothing but aquatic insects and their larvæ; no trace whatever of spawn could be detected. In fact, the insects upon which our poor doomed friend had been feeding were much more likely to destroy fish spawn than it was.

FAMILY. ORIOLIDÆ, *Boie.*

60. ORIOLUS, *Linnæus.*

61. GOLDEN ORIOLE. O. GALBULA, *Linnæus.*

Oriolus galbula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 96.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 227.

Only two specimens of this rare casual visitant have been taken in our district. A female in my collection was killed at Hebburn, near Newcastle, about 1831; the other, also a female, is in the Newcastle Museum, and is probably the individual mentioned in Selby's catalogue, as having been killed at Tynemouth, in the spring of 1821.

FAMILY. TURDIDÆ, *Bonaparte.*

61. TURDUS, *Linnæus.*

62. BLACKBIRD. T. MERULA, *Linnæus.*

Turdus merula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 132.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I. 280.

A common resident.

63. RING OUZEL. T. TORQUATUS, *Linnæus.*

Turdus torquatus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 130.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 287.

A not uncommon spring-and-autumn migrant, breeding in the wild districts in both counties. It nests frequently at Haltwhistle, where I have taken it, and at Rothbury. Mr. Isaac Clark also took a nest at the former place, and, in the course of three weeks after, the birds had rebuilt their nest and hatched a brood of four young.

64. FIELDFARE. T. PILARIS, *Linnæus.*

Turdus pilaris, Bewick, Hist. Brit. Birds, Ed. 1847, I. 124.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 272.

An abundant winter visitant; arriving in October and not departing till late in spring. I saw specimens as late as the 16th

of May, at Rothbury, in 1837, when an individual was shot. I took the eggs on the 16th of May, 1833, in Norway. The birds had just commenced to lay. In that year I saw Fieldfares at Bywell, twelve miles west of Newcastle, a few days before we started on our voyage, which we did on the 6th of May. It would, therefore, seem, that as soon as they arrive at their summer residence they commence to breed.

The Fieldfare breeds in society, and thus differs in habit from the British species of the genus. In one locality, a little north of Drontheim, we found them breeding in great numbers associated together like Rooks. The nests were on the spruce firs; and in this instance so low, for the trees were stunted, that we could put our hands into the nests without climbing. Here we saw a great number of eggs and got a good supply of them. During the time we were examining their nests the birds kept flying over our heads uttering their peculiar, harsh cry.

65. Missel Thrush. T. viscivorus, *Linnæus.*

Turdus viscivorus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 122.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 258.

Not quite so plentiful as the Blackbird and Thrush. It is a resident, remaining with us the whole year.

It is generally supposed that the Missel Thrush has much increased in numbers in the northern counties since Bewick's time. I can only say that I have known it nest in the district for upwards of forty years.

66. White's Thrush. T. aureus, *Hollandre.*

Turdus Whitei, Yarrell, Hist. Brit. Birds, Ed. 4, I., 251.

,, ,, Degland et Gerbe, Orn. Europ. I., 420.

A specimen of this rare casual visitant was shot in Castle Eden Dene, Durham, by Rowland Burdon, Esq., on the 17th of January, 1872: it was only wounded, and was not captured until about a fortnight afterwards, and is now in the possession of that gentleman. A notice of this occurrence was sent to "The Field" newspaper, February, 1872, from which it appears that

the tips of the primaries of one wing had been entirely cut off by the shot. Some of the feathers that had been shot away were kindly sent to me. It lived three weeks in captivity, and ate freely. This is the only specimen that has ever been taken in the district.

67. Redwing. T. iliacus, *Linnæus.*

Turdus iliacus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 128.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 268.

A common winter visitant, appearing in flocks associated with the Fieldfare.

We saw only two nests of the Redwing in Norway during our visit in 1833. They both contained young nearly fledged. This was on the 7th and 8th of June. One was built in a willow, close to the stem, about three feet from the ground; the other was placed at about the same height from the ground in a small spruce. They were both composed of fine grass mingled with a little clay towards the bottom, and were lined with fine grass.

68. Song Thrush. T. musicus, *Linnæus.*

Turdus musicus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 126.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 4, I., 264.

Abundant, breeding early in April. The Thrush affords an interesting example of foster-parentship. On the 23rd of May, 1866, my attention was drawn, by my friend the late Mr. Mawson, of Newcastle, to an instance of a Thrush feeding, with worms, two young Hedge Accentors. I saw the Thrush take worms several times to the nest of the Accentors, who quarrelled for the food thus brought to them. The feeding went on for several days, during which the parent Accentors were never seen, but the young birds were reared.

The late Mr. Charles St. John, in his work "Natural History and Sport in Moray," states of the Thrush as follows: "When it finds a snail which it cannot extract from the shell it carries it to some favourite stone which happens to have a convenient chink in it, pinning the shell so that it cannot slip, and then soon

breaks it up, using its strong bill like a pickaxe. The blows of the bird, when breaking a shell in this manner, may be heard at some distance. In my garden there are certain stones round which there are always a number of snail shells left broken by the Thrushes, and I have frequently seen stones in the same manner in the woods." Mr. St. John was the first to draw my attention to the above facts which are briefly noticed in the works of Montagu and Yarrell, but I have never had the good fortune to observe the Thrush engaged in breaking snail shells, though I can corroborate what is said with regard to the stones used in the process, having often seen them in woods and elsewhere, surrounded by the remains of shells broken by the birds.

62. RUBECULA, *Brehm.*

69. Redbreast. R. familiaris, *Blyth.*

Sylvia rubecula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 155.

Erithaca ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 247.

Common and generally distributed. A resident.

This bold and familiar little favourite can easily be brought to place the utmost confidence in man. In less than half an hour I induced a nestling, that was a perfect stranger to me, flitting about the grounds at Oatlands, the residence of my friend Mr. W. C. Hewitson, to come and feed on my hand. All that was necessary was to be careful not to startle or alarm the bird by a too rapid advance, or by sudden motion of any kind, when placing before it small tempting worms. The first worm I offered it I placed on the ground a few feet from where I sat: the bird cautiously advanced, and devoured the worm then and there. The next worm was placed on my extended hand, and the little fellow flitting past took the worm skilfully off without touching my hand; my confiding friend then boldly alighted on my hand and swallowed, while there, the third worm.

After this I had but to stretch out my hand and it came to it; and thus I fed the Robin for days; and so tame and fearless did it become, that it would feed with the greatest confidence from the hands even of strangers.

63. CYANECULA, *Brehm.*

70. Blue-throated Warbler. C. Suecica, (*Linnæus*).

Sylvia Suecica, Bewick, Hist. Brit. Birds, Ed. 1847, I., 159.

Phœnicura ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 254.

The first recorded British example of this pretty bird and rare casual visitant was shot at the north boundary hedge of Newcastle Town Moor, May 28th, 1826, by Thomas Wm. Embleton, Esq., of Methley, near Leeds, and is now in the Newcastle Museum.

There are three forms or races of this interesting bird: one characterized by a red spot on the blue throat, another by a white spot, and the third by the throat being entirely blue without any spot.

The Newcastle bird belongs to the red-spotted form, as is usually the case with the specimens killed in England. I have an example, however, which was taken in a Nightingale trap, in May, 1845, near London, and which I saw alive shortly after its capture. This has the spot upon the throat a pure white, and is, I believe, the first authenticated individual of this form that has occurred in the British Islands. The blue-throated form has not been taken in Britain.

I have a good series illustrating all the three forms, and, after a careful examination of them, can find no character to lead to the conclusion that they should rank as distinct species.

64. RUTICILLA, *Brehm.*

71. Redstart. R. Phœnicura, (*Linnæus*).

Sylvia Phœnicurus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 161.

Phœnicura ruticilla, Yarrell, Hist. Brit. Birds, Ed. 2, I., 259.

This pretty spring-and-autumn migrant is generally distributed over both counties.

The adult male is always distinguishable from the female. After the autumnal moult, however, his brilliant tints are somewhat obscured by the greyish white margins of the feathers on the underparts, and the grey above is likewise a little dulled at this time with a warmish brown hue, caused also by the margins

of the feathers. In his history of "British Birds" Mr. Gould has figured, for the young, a male in this fresh state of plumage.

The nest plumage is, above, brown, with a pale russet spot at the end of each feather; below, it is of a pale yellow ochre colour, each feather having a dusky margin. The changes of the plumage of this species are well described by Degland and Gerbe, in their "Ornithologie Européenne."

The upper figure in our Plate (VII.) represents the female, the middle figure the male, both in mature plumage, just after the autumnal moult; the lower figure represents the young in nest plumage.

72. Black Redstart. R. tithys, *Scopoli.*

Phœnicura tithys, Yarrell, Hist. Brit. Birds, Ed. 2, I., 264.

Ruticilla ,, Degland et Gerbe, Orn. Europ., I., 440.

This is an extremely rare visitant, usually considered a winter visitant; but it ought, perhaps, to be looked upon as a spring-and-autumn migrant, like its congener the common Redstart; that this is the case is rendered probable by the fact that it occasionally nests in the British Islands.

In 1840, a fine male example was shot at Cresswell, and is now in the possession of Cresswell Baker, Esq. In 1845, a pair nested in the garden of the late Rev. James Raine, the historian of Durham, in that city; and I am indebted to Mr. Wm. Proctor for their nest, which is now in my collection. An egg belonging to it was kindly presented to me by the Rev. James Raine, son of the above-named gentleman. Another bird, a male, was killed at Cullercoats in 1856; and, in March of the following year, a female was shot at the same place. These two examples, for one of which I am indebted to the liberality of Mr. C. M. Adamson, are now in my possession.

This species has the same change of plumage as the common Redstart; but it is not so striking, as the colours are less marked. The first or nest plumage is pretty uniformly of an ash grey, but on the belly and vent it is paler, the neck, breast, and flanks are

slightly marked with transverse dusky bars; similar bars, but more obscure, are perceptible on the head and neck.

65. SAXICOLA, *Bechstein.*

73. Wheatear. S. Œnanthe, (*Linnæus.*)

Saxicola Œnanthe, Bewick, Hist. Brit. Birds, Ed. 1847, I., 173.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 276.

A spring-and-autumn migrant, arriving at the latter end of March, and appearing on the coast in September, preparatory to leaving. At this time the male, female, and young have all assumed their brown livery; on their return, in March, the males are all conspicuously attired in their gay nuptial dress. This striking change is the result of the marginal abrasion of the feathers, revealing their black and white bases.

A few years ago, this beautiful migrant nested frequently on the Newcastle Town Moor, in the turf "dykes" surrounding the "intakes." It is stated in Harting's Handbook that a few occasionally remain in England and Scotland. I have never known the Wheatear to winter with us.

66. PRATINCOLA. *Koch.*

74. Whinchat. P. rubetra, (*Linnæus*).

Saxicola rubetra, Bewick, Hist. Brit. Birds, Ed. 1847, I., 175.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 272.

Common in both counties. A spring-and-autumn migrant, arriving in March. The male, in the breeding season, becomes a little more brilliant in colour than in its freshly moulted plumage, in consequence of the abrasion of the margins of the feathers.

It is difficult to say why this bird has been named Whinchat, for it never breeds in the "whin" or furze, and shows no partiality to it. In some parts of Durham it is called the Haychat, and it is constantly met with in hay fields.

75. Stonechat. P. Rubicola, (*Linnæus*).

Saxicola Rubicola, Bewick, Hist. Brit. Birds, Ed. 1847, I., 177.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 268.

A resident. This is much less abundant than the last species, but is usually seen where there is a large tract of "whin" (furze), perched upon the highest twig, uttering its well-known lively clinking note. Its nest is generally placed in the whin: I have met with it also in heather and juniper.

The first or nest plumage is brown above, with each of the head feathers streaked with pale, obscure yellow, and those of the back terminated by a large spot of the same colour; the under parts are paler and of a colder tint than the back.

The Stonechat remains in the district the whole year. In winter it is pretty uniformly of a rich brown, varied with dark, longitudinal spots, the white in the wing remaining quite conspicuous. Before the breeding season, which is early, the male is much changed in appearance; the head is now black, and the rest of the plumage is more brilliant and clear than it was, owing to the loss of the brown that had previously fringed the margins of the feathers.

67. PRUNELLA, *Vieillot.*

76. Hedge Sparrow. P. modularis, (*Linnæus*).

Accentor modularis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 179.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 243.

One of our commonest resident species, breeding in almost every hedge, and almost rivalling the Robin in its familiarity, but it is more modest and much less pugnacious. It breeds sometimes close into towns. The pretty moss-built nest, with its beautiful blue eggs, is the delight of almost every schoolboy, and has been the starting point of the natural history studies of many naturalists.

68. SYLVIA, *Scopoli.*

77. Blackcap. S. atricapilla, (*Linnæus*).

Sylvia atricapilla, Bewick, Hist. Brit. Birds, Ed. 1847, I., 146.

Curruca ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 307.

A spring-and-autumn migrant. This charming songster is found in all our denes and thickets where there is a dense growth of underwood or scrub, formed of the black thorn, bramble, rose, and honeysuckle. Here it constructs its nest and finds the seclusion in which it delights.

It arrives in April, and leaves us in September; and at that time may be met with on the coast. Individuals, however, occasionally winter in the district. Mr. Dale, of Brancepeth, Durham, shot a male on the 5th of December, 1848, in his garden, when it was feeding on the berries of the privet; and about two years afterwards the same gentleman killed a female, likewise in December, and near the same place.

78. Garden Warbler. S. hortensis, (*Gmelin*).

Sylvia hortensis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 148.

Curruca ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 312.

A spring-and-autumn migrant. This warbler takes up its residence, during its summer sojourn with us, in sequestered localities similar to those chosen by its rival in song, the Blackcap. The nest and eggs of the two species are very similar; and their song is so much alike that it is very difficult to distinguish them.

69. CURRUCA, *Boie.*

79. Lesser Whitethroat. C. garrula, *Brisson.*

Sylvia curruca, Bewick, Hist. Brit. Birds, Ed. 1847, I., 152.

Curruca sylviella, Yarrell, Hist. Brit. Birds, Ed. 2, I., 320.

This spring-and-autumn migrant is not by any means so abundant as the two previous species. It nests where thick underwood prevails, and in sequestered lanes where wild shrubs have

formed a scrubby fringe on either side. In such situations it builds its loosely-constructed nest, two or three of which I have taken in the neighbourhood of Newcastle: one of them occurred in Scotswood Dene, 1832.

80. Whitethroat. C. cinerea, *Brisson.*

Sylvia cinerea, Bewick, Hist. Brit. Birds, Ed. 1847, I., 150.

Curruca ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 316.

A spring-and-autumn migrant. This is the commonest of our warblers, and is very generally distributed; it frequently nests in low herbage by road sides, coming and going with the other warblers.

70. CALAMOHERPE, *Boie.*

81. Great Reed Warbler. C. turdoides, (*Meyer.*)

Calamoherpe turdoides, Degland et Gerbe, Orn. Europ., I., 515.

Acrocephalus ,, Gould, Birds of Gt. Britain, Part XVII.

A male specimen of this rare casual visitant was shot by Thos. Robson, near Swalwell, four miles west of Newcastle, May 28th, 1847. It was skulking in the low herbage by the side of a mill dam. A notice of this capture is recorded in Annals and Mag. Nat. Hist., August, 1847, Vol. XX., p. 135.

The specimen is in the possession of Mr. Thomas Thompson, of Winlaton; and was, I believe, the first recorded occurrence of this large warbler in the British Islands.

71. LOCUSTELLA, *Kaup.*

82. Grasshopper Warbler. L. nævia, (*Brisson*).

Sylvia locustella, Bewick, Hist. Brit. Birds, Ed. 1847, I., 138.

Salicaria ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 285.

Though seldom seen, on account of its skulking habits, it is not by any means rare; it is local, however, preferring low brushy scrub in secluded situations. I have found it breeding in various places in the neighbourhood of Newcastle; but it is no

where so plentiful as on the banks of the Derwent, a few miles west of Newcastle. It is a spring-and-autumn migrant.

72. CALAMODYTA, *Meyer et Wolf.*

83. Sedge Warbler. C. phragmitis, (*Bechstein*).

Sylvia phragmitis, Bewick, Hist. Brit. Birds, Ed. 1847, I., 140.

Salicaria ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 289.

A plentiful spring-and-autumn migrant. It has a sweet and varied song, and as it sings at night it is occasionally mistaken for the Nightingale; and in this way may have originated the reiterated reports that the chief of the songsters had been heard in the northern counties.

Some years ago a Nightingale escaped from confinement in Jesmond Dene: it was almost immediately recaptured. It got, however, bruited about that a Nightingale had been heard singing in the dene; and crowds of people went night after night to hear it. Many came away quite satisfied that they had heard the great songster, the Sedge Warbler having raised his voice as if on purpose to gratify the multitude or to have his joke; and proud would the little merry fellow have been could he have known how well he had succeeded.

Family. TROGLODYTIDÆ, *O. Des Murs.*

73. TROGLODYTES, *Vieillot.*

84. Wren. T. parvulus, *Koch.*

Troglodytes vulgaris, Bewick, Hist. Brit. Birds, Ed. 1847, I., 171.

Troglodytes vulgaris, Yarrell, Hist. Brit. Birds, Ed. 2, II., 169.

A resident. Common in both counties. Delighting in low brushwood, and overhanging banks, where it nests. This little favourite seeks the habitations of man in severe winter weather.

FAMILY. PHYLLOPNEUSTIDÆ, *Degland et Gerbe.*

74. PHYLLOPNEUSTE, *Meyer et Wolf.*

85. WILLOW WREN. P. TROCHILUS, (*Linnæus.*)

Sylvia trochilus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 165.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 329.

A spring-and-autumn migrant. Very plentiful. It arrives in April and leaves in September. In the early summer months it makes the woods ring with its short, lively song.

86. CHIFF CHAFF. P. RUFA, (*Brisson.*)

Sylvia rufa, Bewick, Hist. Brit. Birds, Ed. 1847, I., 166.

,, *hippolais*, Yarrell, Hist. Brit. Birds, Ed. 2., I., 335.

A pretty common spring-and-autumn migrant, frequenting wooded districts where the trees are lofty, from the tops of which it keeps continually uttering the two peculiar well-known notes from which it takes its name. When it leaves in September, the young and the adult are indistinguishable; the former being then as fully coloured as their parents.

87. WOOD WREN. P. SIBILATRIX, (*Bechstein.*)

Sylvia sibilatrix, Bewick, Hist. Brit. Birds, Ed. 1847, I., 163.

,, *sylvicola*, Yarrell, Hist. Brit. Birds, Ed. 2, I., 324.

A spring-and-autumn migrant. Not uncommon, but somewhat local.

75. REGULOIDES, *Blyth.*

88. YELLOW-BROWED WARBLER. R. SUPERCILIOSUS, (*Gmelin.*)

Phylloscopus superciliosus, Yarrell, Hist. Brit. Birds, Ed. 4, I., 443.

Reguloides proregulus, Jerdon, Birds of India, II., 197.

,, *superciliosus*, Gould, Birds of Gt. Britain, Part XV.

A casual visitant. The specimen, figured in Plate VIII., which gives this interesting little bird the right to rank as a British

species, I was fortunate enough to shoot, on the 26th of September, 1838, on the sea banks near Hartley, Northumberland, about four miles north of the Tyne. It was catching insects on the tops of the taller herbage; and its actions were so like those of the Golden-crested Wren, that I mistook it at first for one of that species. Its movements were very graceful as it flitted from plant to plant.

Reguloides superciliosus is common in India, whence my friend, Mr. E. W. Brooks, has kindly sent me a large series of specimens, as well as of the nests and eggs, of which he obtained a good supply in Cashmir.* I am also indebted to my friend for numerous specimens of four or five other species of this pretty group of Indian warblers.

76. REGULUS, *G. Cuvier.*

89. Golden-crested Wren. R. cristatus, *Charleton.*

Regulus auricapillus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 169.

Regulus cristatus, Yarrell, Hist. Brit. Birds, Ed. 2, I., 346.

Common, especially in wooded districts that abound in fir plantations. It is a resident; but large numbers visit the district every autumn from Northern Europe, and may be seen at that time as they arrive on our shores at St. Mary's Island and the other neighbouring headlands.†

Family. PARIDÆ, *Degland.*

77. PARUS, *Linnæus.*

90. Great Titmouse. P. major, *Linnæus.*

Parus major, Bewick, Hist. Brit. Birds, Ed. 1847, I., 202.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 358.

A resident, and very common. In winter it frequents the habitations of man along with the Robin and other birds.

* See "Notes on the Ornithology of Cashmir," by E. W. Brooks, C.E., published in the Journal of the Asiatic Society of Bengal, Vol. 41, Pt. 2, p. 73, 1872.

† It has been said that both the Fire-crested Wren (See Yarrell, British Birds, 2nd Ed. and Gray, Birds of W. Scotland) and the Ruby-crested Wren, (Bree's Birds of Europe) have been met with in the County of Durham, but after having made careful enquiry I find that the statements are erroneous.

91. Cole Titmouse.. P. ater, *Linnæus.*

Parus ater, Bewick, Hist. Brit. Birds, Ed. 1847, I., 204.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 369.

Not uncommon in wooded districts. A constant resident.

On the 18th of May, 1845, Mr. Thomas Robson took a nest of this species, which contained twenty-one eggs. I have seen this nest, the eggs vary much, some being strongly, others only faintly, spotted. There can be little doubt that here there have been layings of more than a single individual; when taken, however, there was only one female on the nest. A nest of this species in my collection contains eleven eggs, and one of the Blue Titmouse contains twelve; the usual number is eight or nine. It is probable that, in such cases as the above (and they are not uncommon), the eggs are the produce of more than one bird.

I am informed by my friend, Mr. T. Thompson, that on more occasions than one he has seen three of the Long-tailed Titmouse occupying one nest.

92. Blue Titmouse. P. cæruleus, *Linnæus.*

Parus cæruleus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 205.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 362.

The most abundant of the genus, and, like the Great Titmouse, it seeks the haunts of man in the winter season when pressed by severe weather. It is a permanent resident.*

* *The Crested Titmouse* is recorded in Harting's "Handbook of British Birds" as having occurred on Sunderland Moor, Durham. I have made enquiry of Mr. William Proctor, who drew up the list of birds in Ormsby's "Sketches of Durham," on which this record is founded, and he gives me, in a reply, dated April 21, 1873, the following information:— "As regards the Crested Tit there is some mistake. I could not say that it came into my hands; I might say that there had been three or four seen by a person of the name of P. Farrow, of Hilltop, who told me that he had seen three or four Crested Tits in the Black Crag, near Witton Gilbert. This is some twenty years ago. He went to get a gun, but could not find them on his return. Farrow was a man who stuffed birds occasionally."

There is a mistake as to the locality, and it must be obvious that such authority as the above is insufficient to establish the occurrence of a species in this district.

78. PŒCILE, *Kaup.*

93. Marsh Titmouse. P. palustris, (*Linnæus.*)

Parus palustris, Bewick, Hist. Brit. Birds, Ed. 1847, I., 209.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 372.

A resident. Generally and abundantly distributed.

79. ORITES, *Mœbring.*

94. Long-tailed Titmouse. O. caudatus, (*Linnæus.*)

Parus caudatus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 210.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 376.

The *Parus caudatus* of Linnæus, "*P. vertice albo, cauda corpore longiore,*" is the white headed form which inhabits the northern parts of Europe. An individual of this interesting form is in the Newcastle Museum; it was one of the old Wycliffe collection, but there is no record of the place where it was taken. This specimen had attracted the attention of Bewick, for I have seen a coloured drawing of it in the possession of the daughters of our celebrated townsman.

A fine specimen (Plate IX) was found dead at Tynemouth, in November, 1852, and was presented to me by the late W. J. Forster, Esq., and is now in my collection. It was in a very good state of preservation, and, when picked up, could not have been dead more than a day or two. It had probably just arrived from the north of Europe.

The strong definition and contrast of the black and white are very striking in this form, and it is somewhat larger than British specimens.

The British form has been described in Sharp and Dresser's "Birds of Europe," Part XIV., p. 104, as a distinct species, under the name *Acredula rosea*, but I think without sufficient reason. It is distinguishable from the Linnæan form by having, in the mature state, a nearly black supercilium.

These authors have figured the young bird of their *Acredula*

caudata, and it is exactly the same as young specimens of our English form in my collection.

The Long-tailed Titmouse is a common resident. There has been much discussion, of late, whether the beautiful domed nest of this species has one or two entrances. I have seen nothing to lead to a suspicion that there is more than one, and I have seen a great number of these nests, and have six or eight in my collection; but I have an example, which I took myself, and which might induce a careless observer to assume that this nest had no orifice at all. The specimen alluded to has a valvular flap or lid, which falls over, and completely closes the entrance. The bird must have raised this lid every time it entered and left the nest: indeed I discovered the entrance by the bird doing so and passing out while I was searching for the hole.

It has been conjectured that the second entrance is required for the accommodation of the tail while the bird was sitting on the eggs. But the fact is, that while so doing the tail is turned over the back of the bird, and is occasionally protruded through the ordinary entrance or aperture; the great depth of the nest however gives sufficient space without rendering the protrusion of the tail at all necessary. Indeed, the Long-tailed Titmouse erects its tail in the same manner as most of the *Passeres* do, and of necessity must do, when sitting on their eggs.

Family. AMPELIDÆ, *Bonaparte.*

80. AMPELIS, *Linnæus.*

95. Waxwing. A. garrulus, *Linnæus.*

Bombycilla garrula, Bewick, Hist. Brit. Birds, Ed. 1847, I., 91.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 388.

A casual visitant, appearing some years abundantly, in others only rarely, and sometimes a year or two will pass without any being seen. Entries in my journal show that it occurred in the district in 1835, -50, -63, -66, -67, and -71, and that it was rather abundant in 1850, -66, and -67. I learn, by the MS. notes kindly

placed in my hands by Mr. J. S. Gurney, Junr., that nineteen specimens were captured in South Durham, in 1849.

Family. MUSCICAPIDÆ, *Vigors.*

81. MUSCICAPA, *Brisson.*

96. Pied Flycatcher. M. nigra, *Brisson.*

Muscicapa luctuosa, Bewick, Hist. Brit. Birds, Ed. 1847, I., 119 and 121.

Muscicapa atricapilla, Yarrell, Hist. Brit. Birds, Ed. 2, I., 177.

This is a spring-and-autumn migrant, though very rarely observed breeding here. Not by any means common in Northumberland and Durham: I never obtained its nest in the district, though Bewick mentions the occurrence of one in Axwell Park, near Newcastle, in June, 1801. And I am informed by Mr. Isaac Clark that a nest was taken with five eggs, in Stella Park, a little west of Newcastle. A few of the birds may always be seen on our coast, in autumn, previous to their migration; and in the middle of May they are occasionally to be observed in the same locality on their return to this country.

The various changes of plumage of the Pied Flycatcher do not seem to be clearly understood. I possess a large series of specimens demonstrating that the adult male, in the breeding season (Plate X., lowest figure), is black on the upper parts, with a broad, obscure band of grey across the rump, and a transverse band of white in front of the head; the under parts are white, and the white patch on the wing is very conspicuous. The mature female, at the same season, differs from the male in being of an obscure ash-brown where the latter is black, in wanting the white on the front of the head, and in having the under parts of a dull white.

After the autumnal moult the sexes, adult and immature, are scarcely distinguishable. They are all of the same obscure brown tint above; the males, however, may be known by the white band on the front of the head, by the white bar on the wing being broader than in the female, and by the basal portion

of the tail being a little darker, and consequently by the white at this part being more conspicuous. The middle figure (Plate X) represents the male in this dress.

It is in this state of plumage that the Pied Flycatchers appear on our shores previous to their departure in autumn. On their return in the spring the males have assumed more or less of the black tint; but it is difficult to obtain, at any time, a specimen with the black pure, some brown being almost always mingled with it.

This change of colour in the males appears to be brought about, not by a moult, but by an alteration in the tint of the feathers themselves. Were it not so the partially black individuals ought to be in a moulting state, but I can see no indication of this in any of my specimens.

The nest, or first plumage, does not appear to have been described. I possess an example in this plumage (Plate X., upper figure) which I shot at Grindelwald, Switzerland, August 6th, 1845. It is not easy to procure specimens in this state, for the nestlings have no sooner completed their first plumage then they begin to moult it. Before the first moult the upper parts are brown as in the female; but the feathers of the back and flanks are obscurely edged with a darker tint, those of the rump, sides of the head, and wing coverts have each a pale spot near the extremity; the under parts are pale as in the female, and the spots on the wings are likewise, as in it, of a dull white. The young males can be distinguished by a slight indication of the white band on the front of the head.

The first plumage of the Pied Flycatcher is, then, spotted, but not so conspicuously as that of the Spotted Flycatcher and many of the other *Passeres*.

In Mr. Gould's work on the "Birds of Great Britain," the male, female, and young are supposed to be figured. The female in that work undoubtedly represents a rather dull-coloured male, the white band in front of the head proving this. The so-called "young" is in the plumage of the female, or that of the young after the first moult.

82. BUTALIS, *Boie.*

97. Spotted Flycatcher. B. grisola, (*Linnæus.*)

Muscicapa grisola, Bewick, Hist. Brit. Birds, Ed. 1847, I., 117.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 172.

A common spring-and-autumn migrant.

Family. HIRUNDINIDÆ, *Vigors.*

83. HIRUNDO, *Linnæus.*

98. Swallow. H. rustica, *Linnæus.*

Hirundo rustica, Bewick, Hist. Brit. Birds, Ed. 1847, I., 299.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 231.

A plentiful spring-and-autumn migrant, arriving in April, and departing in September or October, a little earlier or later according to the season.

The numbers of this delightful harbinger of returning summer, and its congeners, have of late years considerably decreased in our district, probably owing to the diminution of insects, consequent upon the vast increase of chemical and other manufactories.

84. CHELIDON, *Boie.*

99. House Martin. C. urbica, (*Linnæus.*)

Hirundo urbica, Bewick, Hist. Brit. Birds, Ed. 1847, I., 305.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 245.

A common spring-and-autumn migrant, arriving and departing with the Swallow.

85. COTYLE, *Boie.*

100. Sand Martin. C. riparia, (*Linnæus.*)

Hirundo riparia, Bewick, Hist. Brit. Birds, Ed. 1847, I., 307.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 251.

It breeds wherever there is a sandy declivity, and is the earliest of our spring-and-autumn migrants.

FAMILY. CYPSELIDÆ, *Bonaparte*..

86. CYPSELUS, *Illiger*.

101. SWIFT. C. APUS, (*Linnæus*.)

Cypselus murarius, Bewick, Hist. Brit. Birds, Ed. 1847, I., 308.

,, *apus*, Yarrell, Hist. Brit. Birds, Ed. 2, II., 260.

A spring-and-autumn migrant. The Swift usually comes and goes with the Swallows. This fine species nested, thirty or forty years ago, in old houses in the Castle Garth, in the midst of Newcastle; like its relatives, the Swallow and Martin, it is now rarely seen in Newcastle.

It also built in Lumley Castle, on the Wear, and being anxious to obtain its eggs I watched an individual enter a hole in the parapet several times, and was astonished, on ascending the building and capturing the bird, as I supposed on its nest, to find that this contained only sparrow's eggs. This incident clearly shows what caution is necessary in identifying the eggs of birds. Had I not previously known the egg of the Swift I might have asserted that these eggs belonged to it, for I had seen the bird enter the nest several times, and had taken it off the eggs.

"The shortness of the tarsi and great length of wings render the Swift unable to rise from an even surface." So it is stated in "Selby's Illustrations of British Ornithology," Vol. I., p. 129. Impressed with this idea, at the time, I laid my Lumley captive on the floor of the room where I was; it appeared quite helpless and rolled from side to side when touched; becoming emboldened I took it out of doors and placed it on the garden walk, and in a moment it took wing and went off as only a Swift can.

This happened many years ago. I have had, however, a recent demonstration of the same fact. The spring of 1873 was very cold, and a Swift becoming apparently benumbed entered an open window of the Newcastle Infirmary. After the bird had somewhat recovered, I had an opportunity of handling it, and of again trying my old experiment. The Swift was laid on the floor of the apartment, and in an instant it took flight, and flew against the window, but not with sufficient force to injure itself.

Family. CAPRIMULGIDÆ, *Vigors.*

87. CAPRIMULGUS, *Linnæus.*

102. Nightjar. C. Europæus, *Linnæus.*

Caprimulgus Europæus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 311.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 270.

A spring-and-autumn migrant, frequenting the margins of woods in moorland districts, especially where the bracken is plentiful. It lays its eggs on the bare ground, not even seeking the protection of a hollow for them.

103. Red-necked Nightjar. C. ruficollis, *Temminck.*

Caprimulgus ruficollis, Temminck, Man., Ed. 2, T., 438.

,, ,, Gould, Birds of Gt. Britain, Part XIX.

A casual visitant. Only a single individual of this species, which is closely allied to the Common Nightjar, has been taken in Great Britain. This specimen was shot at Killingworth, near Newcastle, on the 5th of October, 1856, and was purchased by me on the following day of a game dealer for my collection. A notice of the occurrence of this bird was given in "The Ibis," Vol. IV., p. 39, 1862.

Order III. COLUMBÆ, *Latham.*

Family. COLUMBIDÆ, *Leach.*

88. COLUMBA, *Linnæus.*

1. Ring Dove. C. palumbus, *Linnæus.*

Columba palumbus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 316.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 277.

A resident. Plentiful the whole year, breeding in every wood and plantation.

In winter the Ring Doves assemble in large flocks, and are

occasionally seen moving southwards. In January, 1873, an extraordinary number of these Pigeons were observed at Marsden, moving in a south-eastern direction, following the coast line. They were two days in passing, and many of them were killed by the farmers in the neighbourhood.

Near Elgin, I once took the nest of this species on the ground, amidst heather, under a branch of a Scotch fir, which stood, a solitary tree, in an extensive open space in a large wood.

This species has, in the last ten or twelve years, greatly increased in numbers, to the serious injury of the agriculturist in Scotland: it is much complained of also in Northumberland. In a letter from my old friend, the late J. C. Langlands, Esq., of Old Bewick, he says, "Another evil arising from the destruction of the birds of prey, and especially of the Magpies, is, that in this country we are preyed upon by immense flocks of the Cushats or Wild Pigeons.

2. Stock Dove. C. ænas, *Linnæus.*

Columba ænas, Yarrell, Hist. Brit. Birds, Ed. 2, II., 83.

,, ,, Degland et Gerbe, Orn. Europ., II., 8.

A resident. It is only recently that the Stock Dove has made its appearance in this district. A single example was shot in Castle Eden Dene on the 26th of October, 1869, by Mr. John Sclater, butler to Rowland Burdon, Esq., and is now in the possession of the former, where I saw it shortly after it was obtained. In 1871, I was informed by Mr. Sclater, that the gamekeeper had taken, in a rabbit trap, another specimen, likewise in Castle Eden Dene, and that he (Mr. Sclater) had found its nest the day after. It was built at the root of a yew tree, that had been blown down over the edge of a cliff. I am informed by Mr. Dale, of Brancepeth, that the Stock Dove has recently made its appearance in that neighbourhood, and is now breeding there. In "The Field" of May 21st, 1872, Mr. Sclater writes, "After I found the nest two years ago, as recorded in "The Field" of March 23rd, 1872, Mr. Burdon gave orders for its protection, and it is multiplying very quickly. And I observe, by "The Field"

newspaper of 1873, that this species had made its appearance in the neighbourhood of Hexham.

Through the kindness of the Right Honourable the Earl of Ravensworth, I am enabled to record the appearance of the Stock Dove at Ravensworth, and the following account is from a letter received from his lordship March 20th, 1874, "I have seen a pair (of Stock Doves) within a few days frequenting the old trees in front of the Castle, and others have been seen likewise. None of our authors upon Natural History mention this Wild Pigeon as a visitant to the northern counties. Selby, the best author and most accurate observer, says, 'that he has never been able to trace it in any of the northern parts of the island.' Nor have I ever before seen the Stock Dove in these woods which are frequented by innumerable flocks of the Cushat. The pair recently observed by me came very near to the walls of the Castle, and I had the opportunity of seeing them more than once perching on the trees at a very short distance."

This interesting species will now probably become a resident in the district. The advance of the Stock Dove northward is probably owing to the same cause that has permitted the increase of its congener, the Ring Dove, namely, the destruction of the birds of prey, and is therefore another proof of man's disturbing influence.

3. Rock Dove. C. livia, *Brisson.*

Columba livia, Bewick, Hist. Brit. Birds, Ed. 1847, I., 318.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 288.

This is a resident, and is undoubtedly the true Stock Dove from which the domestic Pigeon is derived. A few birds breed occasionally in the cliffs at Marsden, and in other localities on the sea coast, both in Northumberland and Durham, where the cliffs are high. But so like is this species to the common domestic Pigeon, that it is difficult to say positively whether they are escaped birds or are really the wild form. I have, however, in my collection a young individual, that was killed in December,

1835, at Newbiggin-by-the-Sea, which is certainly a true wild Rock Dove.

This species is in great abundance, breeding in the cliffs at Gordenstown, near Covesea, in the neighbourhood of Elgin. Here I had a capital opportunity of observing a large colony of these birds, and I shot several specimens. A pair of Peregrines had taken up their abode and reared their young in a hollow in the cliff close to the nesting places of the Pigeons, and were feeding their nestlings on the tender flesh of their neighbours, preferring it evidently to that of the Herring Gulls that were likewise breeding in the same locality, and flying about close to them unheeded and unheeding.

The escaped domestic Pigeon always breeds in cliffs or in old buildings, in exactly similar situations to those chosen by the Rock Dove, and in this fact alone is strong evidence of the relationship of the two. The so-called Stock Dove, on the contrary, takes for its nesting place hollow stems of old decayed trees.

89. TURTUR, *Selby*.

4. Turtle Dove. T. auritus, *Ray*.

Columba turtur, Bewick, Hist. Brit. Birds, Ed. 1847, I., 321.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 299.

Several specimens of this casual visitant have been killed in the neighbourhood of Newcastle: one was shot on the Town Moor, and another at Prestwick Car. On the 17th of May, 1856, a gamekeeper of the late Sir Hedworth Williamson, Bart., killed a fine male specimen near Whitburn, Durham: another occurred near Shotton Colliery, on the 12th of October, 1870; this had no black on the neck, and was therefore probably a young bird.

This species has never been known to breed in either county.

Order IV. GALLINÆ, *Linnæus.*

Family. PTEROCLIDÆ, *Bonaparte.*

90. SYRRHAPTES, *Illiger.*

1. Pallas's Sand Grouse. S. paradoxus, (*Pallas.*)

Syrrhaptes paradoxus, Degland et Gerbe, Orn. Europ., II., 28.

,, ,, Gould, Birds of Gt. Britain, Part IV.

A casual visitant. In 1863, at the time of the great visitation of this eastern bird to Europe, twenty-two or twenty-three specimens of it were killed within our district, as recorded in my notice on the subject printed in the sixth volume of the "Transactions of the Tyneside Naturalists' Field Club," p. 100. I have received, since then, three additional examples, two males and one female, that were killed at the same time, near Port Clarence, at the mouth of the Tees. These can scarcely be the three birds alluded to, as occurring in that neighbourhood, by Prof. Newton, in his valuable paper in the sixth volume of "The Ibis," "On the irruption of Pallas's Sand Grouse," for of those so recorded two were females and one a male.

The first that were taken in England, on this visitation, were three that were shot out of a flock of twelve or fourteen, near Thropton, on the Coquet, on the 21st of May, and mentioned in my notice. For two of these, which are now in my possession, I am indebted to the late Mr. William Reay, of Thropton.

In "The Ibis" for July, 1872, p. 334, it is stated by Dr. Tristram, that the Sand Grouse was observed on the coast of Northumberland, opposite to the Farne Islands, and that a specimen was shot, and examined by the Rev. Charles Thorpe.

A letter from the latter gentleman, received on the 2nd of June, 1873, informs me that he "did not see the Sand Grouse last year, but on the 18th of May, 1872, Mr. T. Caldwell told me he had been in pursuit of them on the 16th and had shot one, but having allowed it to remain on the ground to attract the others, it so far recovered as to rise and fly on his approaching."

Family. TETRAONIDÆ, *Leach.*

91. LAGOPUS, *Brisson.*

2. Red Grouse. L. Scoticus, (*Brisson.*)

Tetrao Scoticus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 350.

Lagopus ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 351.

This fine resident species is found wherever heather and ling abound.

It is generally considered to be peculiar to the British Islands. It comes however so close to *L. saliceti* or *albus*, that the two so-called species can scarcely in the summer dress be distinguished: in size they agree, and in the colour and markings of the plumage they are the same. And I have the authority of Mr. Norman Cookson, that the cry of *L. saliceti* is exactly like that of the British form. The beak however of the former is usually a little stronger than that of the latter. The change of white, in the winter, of the *L. saliceti*, is the only distinguishing point of any importance, though *L. Scoticus* is frequently found, in winter, to have a good deal of white on the under parts, particularly on the median line of the lower parts of the belly and vent. I have an example that was shot in Northumberland, in which the white extends from the breast to the vent, and from flank to flank, the plumage of the belly being a little broken with brown. The lesser and greater coverts of this specimen are tipped with white, the under coverts are white, and the under tail coverts are largely tipped with white. Another example, likewise in my possession, shows a great deal of white on the belly and on the under tail coverts; the margin of the wings and the under coverts are also white, and the greater and lesser coverts are tipped with the same; and I possess the remains of a specimen, that was killed in Weardale, which has the primaries, primary coverts, and bastard wing of a pure white, the shafts of the quills are also white. In *L. saliceti*, however, the shafts of the quills are usually dusky on the upper surface, though I have an individual in which most of the shafts are white on both sides. There can therefore be

little doubt that *L. Scoticus* is merely a variety or race of *L. saliceti*, as believed by Schlegel and some other authors.

A very beautiful variety of the Red Grouse was shot by the late Dr. Beggs, on the moors near Reedsmouth, on the 4th of November, 1859, which he kindly presented to me. The under parts of this bird are of a warm yellow-ochre colour, marked with strong, distant, black, undulating, broken bars; on the flanks the bars are stronger than elsewhere, and resemble those of the summer dress of the female Ptarmigan. The upper parts are darker but of the same tint, and the undulating bars are smaller and more crowded; these parts, in fact, resemble very much, both in colour and markings, those of the Ptarmigan.

Varieties also frequently occur on our moors having the feathers of the upper parts with strong, dusky, transverse waved lines, and terminated by a large pale buff or white spot. The birds with this beautiful and strongly marked plumage are all females, and they present a remarkable resemblance to the Ptarmigan in the summer dress. The female Grouse is always more varied than the male, and does in fact always more or less approach to the colour and style of markings of the female Ptarmigan. The more uniform colouring and less conspicuous markings of the males of the two forms are also remarkable.

I am not only satisfied that *L. Scoticus* is merely a race of *L. saliceti*, but I am quite inclined to think that the Scotch Ptarmigan, and the Rock Grouse of Iceland, Greenland, Lapland, Norway, and Switzerland, ought not to rank as species, but only races of one and the same form.

Indeed there is not much to distinguish *L. saliceti*, including the race *L. Scoticus*, from the Ptarmigan; the latter is smaller, and the head and beak are also smaller than in the others. In habits, however, they differ considerably, and the Ptarmigan does not utter the alarm cry, *beck, beck*, which is common to both *L. saliceti* and *L. Scoticus*, but makes a very peculiar low croaking noise when disturbed, which it utters at intervals while on the wing, and which resembles nothing so much as the croaking of a toad.

In the downy state the markings of the Ptarmigan and those

of the Red Grouse are very similar, but the colours differ considerably, that of the Ptarmigan being very much colder in tint; so much so, indeed, that while it is grey or ash in the latter, it is warm yellow-ochre colour in the former or Red Grouse. But I have only seen a single individual of the Ptarmigan in this state, and it is from the Alps. Mr. Gould, in giving a figure of the Ptarmigan, in the downy state, in his work on "The Birds of Great Britain," represents it of the same warm colour as that of the Red Grouse, and with markings perfectly similar, but it is not stated where the specimens were obtained.

The eggs of all the European Grouse, including the two British forms, are so much alike, that were they mixed it would be quite impossible to distinguish them. Examples of Ptarmigan's eggs, that I have received from Greenland and Iceland, are however generally a little smaller than my Scotch examples.

The first plumage of the Ptarmigan closely resembles that of the Red Grouse. It has no white in any part of the body. The only individual that I have seen in this state is in my collection; it is from Iceland, and is about half grown. The secondaries and the two principal or longest primaries are brown, like those of the Red Grouse, and the external primaries, which are in a much less developed state than the others, are white. There are two growing feathers of the coverts of the left wing white, and a single secondary of the right wing is also white. The dusky undulating broken bars on the neck, breast, and flanks are strong and distant, as in the adult female; the centre of the belly is also barred transversely, but somewhat obscurely; the tail feathers are just making their appearance and are black, tipped with white.

92. TETRAO, *Linnæus.*

3. Black Grouse. T. tetrix, *Linnæus.*

Tetrao tetrix, Bewick, Hist. Brit. Birds, Ed. 1847, I., 347.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 340.

A resident. Plentiful in the wild tracts of both counties, especially where the birch abounds, and in damp situations. Its

great strongholds appear to be up the North Tyne in the neighbourhood of Kielder, and on the Cheviot range.

Black Grouse used frequently to occur at Prestwick Car. On the 17th of June, 1853, I saw its nest and eggs on Callerton Fell, a few miles south-west of Prestwick Car.

Mr. Yarrell mentions, in his "History of British Birds," the occurrence of several hybrids of the Black Grouse and Pheasant. In the Newcastle Museum there are two examples of this hybrid. One was shot near Alnwick Castle, November, 1837, the other at Belsay, 1842, by C. H. Cadogan, Esq., of Brinkburn.

I have in my collection three curious varieties of the Black Grouse, two of which resemble the female to a great extent, but are considerably darker; both have the tail forked, but much less so than in the male, and as in it, the under tail coverts are white, and both specimens have the white patch on the secondaries as well as on the shoulder, and one of them was getting the glossy green neck of the male. The individual most resembling the female had the ovary apparently quite in a healthy condition. This specimen was shot near Angerton, on the Wansbeck; the other was also killed in Northumberland.

The third variety was shot near Cambo, on the 20th of August, 1869. This is almost in the complete plumage of the adult male, but has some brown and white feathers about the head and throat. The tail is only four inches long, though it appears to be full grown, and is very slightly forked, and it is not more than half the usual length; the bird itself is fully one-third less than the adult male, and is probably nothing more than a dwarfed example.

93. STARNA, *Bonaparte.*

4. Partridge. S. cinerea, (*Charleton.*)

Perdix cinerea, Bewick, Hist. Brit. Birds, Ed. 1847, I., 357.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 370.

A resident. The Partridge is plentiful in the northern counties, but the stock is liable to great fluctuation in accordance with the state of the weather. In 1870 and 1871, the supply

was unusually abundant, but in 1872 there was a great decrease in the number, apparently owing to the large rainfall of that year.

Several examples of a very pretty dark brown variety have occurred in Northumberland during the last few years. The first that came under my notice was shot in October, 1863, near Cresswell: it is a young bird. In the following year two other examples were killed in the same locality; one, young, on the 7th of September, the other, a male, on the 19th of October. An adult bird was shot at Eslington November 9th, 1865; on the 16th of November, 1868, another example was obtained at Cresswell. I am informed by Mr. Duncan, that in the autumn of 1869, three additional individuals were killed at Cresswell—one young and two adults, one of the latter being a male: and that two others were shot at that place on the 3rd of October the same year. An example in the Newcastle Museum, presented by E. Warwick, Esq., was killed near Kirkwhelpington, on the 7th of September, 1870; and on the 16th of January, 1871, a specimen was obtained at Widdrington, and is now in my possession. Thus, in all, twelve of this interesting variety have been procured, nine of which were killed at Cresswell.

A remarkable feature in the colour of this variety is the entire absence of the grey ash tint that so agreeably diversifies the neutral colouring of the normal plumage. The whole of the head and neck is of a pale buff or chestnut, similar to that of the front of the head and neck of the ordinary bird; the upper parts are a dark red-brown, each feather having the shaft pale and the extremity with a large spot of obscure white; the upper tail coverts are pale chestnut like the head, with dark brown bands; the tail-feathers are of the same chestnut colour, but darker than those of the normal bird; the under tail coverts are brown, clouded with darker colour. The whole of the under parts is of a uniform dark chestnut colour, as if the usual horse-shoe mark had been extended; on the breast in front, where this dark brown meets the pale chestnut or buff on the neck, it is not abruptly defined, but breaks into it irregularly; the thighs are pale obscure buff, and so are the feathers of the vent.

The above is a description of a male specimen in my collection,

of which the upper figure (Plate XI.) is a representation. There is not much difference in the various specimens obtained.

The dark rich brown colour of these birds suggests at first sight the opinion that they may be hybrids between the Partridge and Red Grouse, but on a more careful examination there is nothing to confirm this.

Mr. Gould, in his "Birds of Great Britain," mentions a similar brown variety of the Partridge, but it is characterized by having in both sexes a dark horse-shoe mark on the breast. In our specimens, though the under parts are of a rich dark chestnut, there is not the slightest indication of this peculiar mark, but as Mr. Gould does not give any further description, it is impossible to say how far the two varieties agree.

Since the above was written, I have information of the capture of several other specimens, two of which have come into my possession, one through the kindness of Mr. H. Wilkinson, Veterinary Surgeon, of Newcastle-upon-Tyne, and the second I obtained of Mr. Duncan, bird-stuffer; this last is a young bird in first plumage (Plate XII., lower figure), and is just beginning to change to the brown plumage of the adult bird. It was shot in Northumberland on the 19th of September, 1873. The former (Plate XII., upper figure,) is also a bird of the year, but being shot on the 16th of October, 1873, it is probably a month older than the latter bird, and consequently is much further advanced in its change of plumage. It has the neck clothed with pale cream-coloured feathers, which are undoubtedly the first or nest feathers, for they are being replaced by the brown of the adult bird.

94. COTURNIX, *Mœhring.*

5. Quail. C. communis, *Bonnaterre.*

Perdix coturnix, Bewick, Hist. Brit. Birds, Ed. 1847, I., 360.

Coturnix vulgaris, Yarrell, Hist. Brit. Birds, Ed. 2, II., 400.

A spring-and-autumn migrant, not by any means common, and somewhat local, but occasionally breeding in the district. Nests

have occurred at Howick, Cullercoats, Fulwell, Callerton Fell, Wallsend, and Westoe.

6. Virginian Quail. C. Virginianus, (*Linnæus.*)

Ortyx Virginiana, Yarrell, Hist. Brit. Birds, Ed. 2, II., 391.

,, ,, Macgillivray, Hist. Brit. Birds, I., 228.

This is an introduced species. A specimen was shot October 2nd, 1841, at Rothbury, out of a "covey of Partridges." This example is in my collection. It is an adult female and had, when fresh, all the appearance of having reared a brood that year; and it may be questioned whether the birds with which it was associated were Quails or Partridges.

In the early part of this century several pairs of Virginian Quails were turned out in Norfolk, by the late Earl of Leicester; but these, according to Mr. Stevenson, in his "Birds of Norfolk," have long since died out. In 1840, a number were liberated in the neighbourhood of Windsor, by His Royal Highness the late Prince Consort ("Harting's Handbook of British Birds," p. 130). Our example may probably be one of these introduced birds, or the progeny of such.

A considerable number of this Quail were set at liberty on the banks of the Coquet, a little above Warkworth, in the spring of 1872, by Mr. W. R. Pape, gun-manufacturer, Newcastle, and I am informed that several broods were reared the same year, and that they are nesting again this year (1873), and are apparently going on very favourably.

Family. PHASIANIDÆ, *Vigors.*

95. PHASIANUS, *Linnæus.*

7. Pheasant. P. Colchicus, *Linnæus.*

Phasianus Colchicus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 339.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 310.

A resident. The Pheasant, having no right to be considered an indigenous British bird, should not perhaps have been included

in this list; it is, in fact, a semi-domesticated fowl. The Chinese, Japanese, and Bohemian races of this bird have, of late years, been introduced into the district.

Order V. GRALLÆ, *Linnæus.*

Family. OTIDIDÆ, *Degland.*

96. OTIS, *Linnæus.*

1. Great Bustard. O. tarda, *Linnæus.*

Otis tarda, Bewick, Hist. Brit. Birds, Ed. 1847, I., 367.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 415.

A casual visitant. A specimen of the Great Bustard was shot on the 2nd of January, 1871, at Fenham Flats, Holy Island, and came into the possession of Henry Gregson, Esq., Low Lynn.

A fine female example was shot on the 8th of March, 1854, in a turnip field near Brampton, Cumberland. I saw the specimen a few days after it was stuffed, and while it was quite soft and flexible, and the legs were unfaded; the tarsi and toes were greyish, with obscure flesh colour between the scales. This specimen is in the collection at Blenkinsop Castle, the residence of Colonel Coulson. Of course, this individual does not strictly belong to our district, but it is as well perhaps to record the occurrence, in an adjoining county, of this interesting bird which is destined, probably, ere long, to cease being even a visitant to the British Islands.

2. Little Bustard. O. tetrax, *Linnæus.*

Otis tetrax, Bewick, Hist. Brit. Birds, Ed. 1847, I., 371.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 426.

A casual visitant. I am informed, by the Right Honourable the Earl of Ravensworth, that a specimen, in the museum at Ravensworth Castle, of the Little Bustard (which is in the plumage of the female), was taken at Prestwick Car about the year 1820, and that his lordship had it alive for a short time.

We learn from Selby's "Illustrations of British Ornithology,"

that other two specimens of this rare visitant have been taken in Northumberland. "One of these, in the possession of His Grace the Duke of Northumberland, and, from the tints of its plumage, apparently a female, was shot near Warkworth in the autumn of 1821; the other was killed on the 1st of February, 1823, near Twizell," and was placed in Mr. Selby's collection.*

FAMILY. CHARADRIIDÆ, *Leach.*

97. ŒDICNEMUS, *Temminck.*

3. GREAT PLOVER. Œ. CREPITANS, *Temminck.*

Œdicnemus crepitans, Bewick, Hist. Brit. Birds, Ed. 1847, II., 1.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 436.

A specimen of this rare visitant was shot in a grass field, near Frenchman's Bay, South Shields, on the 4th of February, 1864. I saw it shortly after it was stuffed: it is a young bird in first plumage.

98. CURSORIUS, *Latham.*

4. CREAM-COLOURED COURSER. C. GALLICUS, (*Gmelin.*)

Cursorius Europœus, Bewick, Hist. Brit. Birds, Ed. 1847, I., 373.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 431.

According to Harting, a specimen of this rare bird occurred at Cheswick, Northumberland, November 9th, 1846, and is preserved in Mr. Brodrick's collection. Another specimen, preserved in the Berwick Museum, is reported by Mr. Gurney in the "Zoologist," 1871, p.p. 2522 and 2562, from Low Lynn, in the same county.

* The Collared Pratincole (*Glareola pratincola*, Linn.), reported by Mr. Duff, "Zoologist," 1850, p. 2771, and quoted in Harting's "Handbook of British Birds," p. 133, as having occurred at Bedlington, Northumberland, is, according to a letter received from Mr. Duff, a mistake, as the specimen was forwarded to him by a friend from Bridlington, Yorkshire.

99. PLUVIALIS, *Barrère.*

5. Golden Plover. P. apricarius, (*Linnæus.*)

Charadrius pluvialis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 12.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, I., 447.

A resident. Common in both counties, breeding on the upland fells, preferring marshy situations. In autumn, it congregates in large flocks, associating with the Peewit.

6. Grey Plover. P. varius, (*Brisson.*)

Vanellus melanogaster, Bewick, Hist. Brit. Birds, Ed. 1847, II., 19.

Squatarola cinerea, Yarrell, Hist. Brit. Birds, Ed. 2, II., 477.

This is a winter migrant, but not abundant. It usually appears in September, and is most commonly in the nest or first plumage. Specimens in their full winter plumage are rare. I have, however, examples that were killed in October, November, February, and January. It sometimes occurs in small flocks. On the 13th of September, 1870, I saw six together on the sands at Newbiggin-by-the-Sea: they were all in the first plumage. Mr. C. M. Adamson has in his collection an example in the summer dress, which was shot in August, at St. Mary's Island, a few years ago. I know of no other instance of the occurrence of this bird in summer plumage within the district.

It is worthy of notice, however, that I received, from Mr. William Hircock, three specimens of this species in full summer dress, two males and one female, which were shot on the Wash, near Guyhorn, on the 23rd of May, 1844. And what is equally extraordinary, they were accompanied by three Knots or Red Sandpipers, likewise in complete summer costume, which were shot at the same time and place.

100. MORINELLUS, *Bonaparte.*

7. Dotterel. M. Sibericus, (*Lepechin.*)

Charadrius morinellus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 14.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 455.

The Dotterel visits this district every year during its spring and autumn migrations, probably to and from the mountains of Cumberland and Westmoreland. I have its eggs from Cross Fell, Saddleback, Helvellyn, and Skiddaw.

It is met with on the Newcastle Town Moor in spring and autumn, and apparently in undiminished numbers; for this year, 1873, a flock of twenty were observed on the wing, two of which were killed by coming in contact with the telegraphic wires. It also occasionally visits the neighbourhood of Sunderland; and I saw two individuals on the moor at Newbiggin-by-the-Sea, in 1871. Dotterels never stay more than a few days with us. The earliest arrive in the first week of May, and on their return in autumn make their appearance in September.

I shot a specimen on the Newcastle Town Moor in the first plumage; and I have another example in the same dress, killed on Cross Fell, on the 31st of August. In the first plumage the feathers of the head, neck, back, scapulars, and wing coverts are dusky brown, widely edged with russet or yellowish white; the quills are dusky with the shaft of the external one white, the tertiaries and tail-feathers a dusky brown, widely edged with russet; the tail coverts pale brown, strongly edged with russet; supercilium pale buff; cheek and auriculars pale drab, streaked with darker colour. The under parts are of a pale dun or drab colour, lighter on the belly and vent; the neck and gorget are of the same colour, with the feathers of the latter pale brown in the centre, and immediately below these the white transverse band of the adult is obscurely indicated by one of a pale dun colour; a little lower on each side of the breast is a slight shade of brown, where, in the adult bird in summer, there is black.

101. CHARADRIUS, *Linnæus.*

8. Ring Dotterel. C. hiaticula, *Linnæus.*

Charadrius hiaticula, Bewick, Hist. Brit. Birds, Ed. 1847, II., 16.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 465.

A common resident in both counties. It breeds on the pebbly shores of the coast, and I have seen it once or twice by the side of the Coquet, during the breeding season, six or seven miles below Rothbury; but I have never known it lay its eggs far from the sea shore. In September and October, and even later in the year, it assembles in considerable flocks on the coast.

102. VANELLUS, *Linnæus.*

9. Peewit. V. cristatus, (*Meyer and Wolf.*)

Vanellus cristatus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 21.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 481.

This beautiful resident species is common everywhere, but is most plentiful in uncultivated districts. It breeds very early, sometimes laying its eggs in the beginning of April. I have found the eggs much incubated on the 14th of April. Of course, the breeding time is influenced considerably by the state of the weather. Frequently I have known the first layings to be covered up and destroyed by the snow; but against such casualties nature has amply provided, by enabling the Peewit to lay again and again until a brood is hatched and reared. Hence the folly of the dread that has been expressed in some quarters, that so useful a bird, as this is stated to be to the agriculturist, should be destroyed by taking a few of its first layings. In fact, the Peewit appears to have increased in numbers within the last few years, probably on account of the destruction of the birds of prey by the game-preservers.

At the commencement of the breeding season, as much as half-a-crown a piece is sometimes given in London for Peewit's eggs, but they soon become so plentiful that they can be purchased for

one shilling a dozen; and, as this price cannot pay for gathering them, the supply soon ceases, and the birds are left to rear their broods in peace and comparative safety.

103. HÆMATOPUS, *Linnæus.*

10. Oystercatcher. H. ostralegus, *Linnæus.*

Hæmatopus ostralegus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 9.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 496.

This is a resident in the district, and is abundant by our sea shore, breeding on the Farne Islands, and on the beach of the adjacent main land. It appears in flocks during the autumn and winter months, but is rarely seen far from the coast.

104. STREPSILAS, *Illiger.*

11. Turnstone. S. interpres, (*Linnæus.*)

Strepsilas collaris, Bewick, Hist. Brit. Birds, Ed. 1847, II., 25, 27.

,, *interpres*, Yarrell, Hist. Brit. Birds, Ed. 2, II., 486.

A common autumn or winter migrant, reaching our coast in September, and remaining throughout winter. I have a specimen shot on the coast of Northumberland as late as the middle of May.

This species breeds late. We took its eggs on the Norwegian coast, in 1833, on the 14th of June. It has been said to breed on the Farne Islands (Harting's Handbook of British Birds, p. 44). I am not in any way cognisant of the eggs occurring in that locality, and it seems to me that the instances mentioned are not sufficiently authenticated.

I have a specimen, killed on the 3rd of June, 1847, at Rampside, Lancashire, in full summer plumage, but it has not the bare spaces which are seen on the breast of a sitting bird.

Family. SCOLOPACIDÆ, *Vigors.*

105. NUMENIUS, *Moehring.*

12. Curlew. N. arquata, (*Linnæus.*)

Numenius arquata, Bewick, Hist. Brit. Birds, Ed. 1847, II., 68.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 577.

The Curlew is a resident, common on all marshy moorlands and grassy wastes, but less abundant in Durham than in Northumberland. It frequently bred at Prestwick Car, and I once took its eggs at Blagdon: this was on the 14th of May, 1857. It remains with us the whole year, and in winter frequents the sea coast, where it is occasionally seen also in summer.

The sexes do not differ in plumage. The young before the first moult are a little warmer in colour, and have the pale margins of the feathers wider than the adult.

13. Whimbrel. N. phæopus, (*Linnæus.*)

Numenius phæopus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 70.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 583.

An autumn or winter visitant, arriving on our shores in August and September, and departing in spring. During its sojourn with us it seldom leaves the coast, where it is not uncommon in small flocks of rarely more than four or five.

The young before moulting are more clearly and strongly marked over the whole of the upper parts than the adult, and the bill is a little shorter.

106. LIMOSA, *Brisson.*

14. Black-tailed Godwit. L. ægocephala, (*Linnæus.*)

Limosa melanura, Bewick, Hist. Brit. Birds, Ed. 1847, II., 113.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 634.

A rare casual visitant. One in my collection was shot, in 1831, at Prestwick Car, and is in summer plumage. Another, shot at the same place, on the 23rd of September, 1846, is also

in my collection, and is in the first plumage. A fine female, in full summer dress, was shot at Alnmouth in July, 1847, and is in the collection of Mr. C. M. Adamson. On the 8th of September, 1869, Mr. R. Duncan killed two examples out of a flock of four: they were young birds in first plumage.

Mr. Selby records the capture of two specimens at Budle Bay: "they were moulting, and rapidly acquiring their nuptial livery."

15. Common Godwit. L. rufa, *Brisson.*

Limosa rufa, Bewick, Hist. Brit. Birds, Ed. 1847, II., 115.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 641.

An autumn or winter visitant, appearing on our coast in autumn and winter. It congregates in large flocks at Fenham Flats. They gradually disappear in spring.

I have a specimen which was killed on the Northumberland coast in March, 1855, having to some extent acquired its summer dress; and another, also in my collection, in complete summer plumage, was likewise shot on the coast of Northumberland.

107. SCOLOPAX, *Linnæus.*

16. Woodcock. S. rusticula, *Linnæus.*

Scolopax rusticola, Bewick, Hist. Brit. Birds, Ed. 1847, II., 118.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 1.

A resident. The Woodcock arrives on our coast in October, and departs in spring: but a few remain in the district to breed. Several nests have been taken; one, containing young, was found near Hollyn Hall, on the banks of the Tyne, by the gamekeeper of Edward James, Esq., a few years ago; one of the parent birds was shot from the nest. On the 6th of April, 1869, a nest of eggs was also taken at Dilston; and in April, 1872, a nest with four eggs, two of which are in my collection, was found near Medomsley on the Derwent. This nest had been forsaken in consequence of a fall of snow, in which the eggs were

buried. In the same year three broods were found in Chopwell Woods, in the valley of the Derwent. I am indebted to Mr. Isaac Clark for this information, from which it appears that the Woodcock is a pretty constant breeder in the neighbourhood of the Tyne, and not by any means so uncommon as has been supposed. Several other nests have occurred in Northumberland and Durham. Between the years 1868 and 1872, seven nests of the Woodcock were found on the banks of the Tyne, between Dilston and Prudhoe, in April and May. In three of them the young were hatched; four others had their full complement of eggs.

But a rather curious question arises. After the broods have fairly flown, what becomes of these birds, both parents and young? are they ever seen during the summer and autumn months? it might be expected that they would remain in the neighbourhood until the season of migration arrives, and that, as the birds from the more northern latitudes make their appearance, those bred in the district would take their departure southward. Were this so the birds would surely be seen. Do they, then, leave as soon as the broods are able to use their wings? This is certainly unlikely. It is possible that they may be all shot off; for, assuming that the Woodcock is a mere migrant, no one allows a single individual to escape if he has a chance of shooting it. I have known a gamekeeper shoot a Woodcock, and, on picking it up, find a brood of young lying at his feet. Perhaps the Act of 1872, for the preservation of birds, may be of service in respect to this species.

The Woodcock usually arrives on our coast singly or in small detachments of two or three at a time. However, they occasionally appear in considerable numbers. Mr. W. Allan, of Marsden Rock, shot, in October, 1865, thirty-one birds in one day.

This species has the power of removing its young when disturbed; it also carries its young from the nesting place to the feeding ground. Mr. Charles St. John, who believed that the young, when so carried, were held in the claws, states in his "Field Notes and Tour in Sutherland," p. 164, that "many people doubt the fact of the Woodcock carrying her young, from

the wood to the swamp, in her feet, and certainly the claws of a Woodcock appear to be little adapted to grasping and carrying a heavy substance: yet such is most undoubtedly the case. Regularly as the evening comes on, many Woodcocks carry their young ones down to the soft feeding grounds, and bring them back again to the shelter of the woods before daylight, where they remain during the whole day. I myself have never happened to see the Woodcocks in the act of returning, but I have often seen them going down to the swamps in the evening, carrying their young with them. Indeed, it is quite evident that they must in most instances transport the newly-hatched birds in this manner, as their nests are generally placed in dry heathery woods, where the young would inevitably perish unless the old ones managed to carry them to some more favourable feeding ground."

In 1849 I accompanied Mr. St. John to Sutherlandshire, on an ornithological tour, and had the good fortune to observe the Woodcock perform this feat. As we were rambling in the neighbourhood of Dunrobin, where it nests regularly, we raised the bird, and at once saw the young suspended beneath the body of the parent. It was close to us when it rose, so that we had an excellent view of both the young and the old bird. "Now," said Mr. St. John, "are you not convinced?" "Yes," I replied, "that the young is carried, but not in the claws which, I have said, and still believe, are too feeble for the purpose." I picked up one of the brood; it was about the size of a Snipe; when I grasped it, it made a peculiar squeaking noise. In the course of half-an-hour we returned to the spot, and again witnessed the old bird carry off another of its chicks, and now became quite satisfied of the *modus operandi;* the young bird was pressed close up to the breast of the parent, as indeed was obvious in the first instance. Hence the inference of us both, that the young was held between the legs and not in the claws.

The food of the Woodcock is the earth-worm, of which it devours great numbers. Montagu, in his "Ornithological Dictionary," Ed. 2, p. 562, says, "The enormous quantity of worms that these birds eat is scarcely credible; indeed, it would be the constant labour of one person to procure food for two or

three Woodcocks." I am indebted to Edmond Crawshay, Esq., for the knowledge of a fact that verifies this assertion of our distinguished ornithologist. I am told by Mr. Crawshay that a friend of his reared a brood of three Woodcocks, and that a man was kept constantly employed during the day in obtaining the necessary supply of worms.

108. GALLINAGO, *Leach.*

17. Great Snipe. G. major, (*Gmelin.*)

Scolopax major, Bewick, Hist. Brit. Birds, Ed. 1847, II., 124.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 18.

A rare autumn or winter visitant, arriving in the district usually in September, and shortly afterwards disappearing.

A specimen was shot at Thornley, county of Durham, September, 1830; one, in the Newcastle Museum, was killed at Witton-le-Wear, October, 1830; another, in my collection, was picked out of a lot of Common Snipe, in a poulterer's shop in Newcastle, September, 1873. I have also an example shot at Whittingham, Northumberland, September 11th, 1855, and one taken near Bishop Auckland, 1833. Two specimens were killed near The Chesters, the residence of John Clayton, Esq., one on the 19th of September, 1856, the other a few days afterwards. There are two examples in the collection of Mr. C. M. Adamson, one of which was shot at Elsdon, September 4th, 1839, another at Scotswood, September 18th, 1840.

Mr. Duncan informs me that he has had two specimens through his hands, one shot at Blenkinsop, the other at Brinkburn, both in September, 1859.

18. Common Snipe. G. scolopacinus, *Bonaparte.*

Scolopax gallinago, Bewick, Hist. Brit. Birds, Ed. 1847, II., 128.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 25.

A common resident, breeding on the marshy moor land of both counties. It was very abundant at Prestwick Car, where I have found three or four nests in a day.

The peculiar murmuring or drumming sound produced by the Snipe, during the breeding season, when disturbed from its nest, and when flying overhead, circling rapidly in the air at this period, attracted, a few years ago, considerable attention, on account of an ingenious paper on the subject by Mr. W. Meves, of Stockholm, published in the "Proceedings of the Zoological Society of London," Part XXVI., 1858, p. 199. In this communication it is endeavoured to be demonstrated that this enigmatical sound is produced by the two lateral caudal feathers. Before this time the general opinion was, apparently, that the murmuring or neighing, as it has been called, resulted from the action of the wings, which, while the sound lasts, are always rapidly vibrating. The lateral tail-feathers are stated, in this communication, to be very peculiarly constructed, the shafts being uncommonly stiff and sabre-shaped, with "the rays of the web strongly bound together and very long, the longest reaching nearly three-fourths of the whole length of the web, these rays lying along or spanning from end to end of the course of the shaft, like the strings of a musical instrument." Such is the description of these supposed sonorous feathers of the Common Snipe, in which it is stated there are two, the outer tail-feather of each side; and it is further remarked, that "If one blows from the outer side upom the broad web of such a feather it comes into vibration, and the sound is heard, which, though fainter, resembles very closely the well-known neighing. But to convince oneself," so continues Mr. Meves, "that it is the first feather which produces the peculiar sound, it is only necessary to carefully pluck out such a one, to fasten its shaft with a fine thread to a piece of steel wire, a tenth of an inch in diameter, and a foot long, and then to fix this at the end of a four-foot stick. If now one draws the feather, with the outer side forward, through the air, at the same time making some short movements or shakings of the arm, so as to represent the shivering motion of the wings during flight, one produces the neighing sound with the most astonishing exactness."

Then follows a description of a contrivance to produce the humming of both the feathers at once. And then it is stated

"that such a sound, but in another tone, is produced, when we experiment with the tail-feathers of other kinds of Snipes. But in *S. major*, *Capensis*, and *frenata* there are four so-called humming feathers on each side, which are considerably shorter than in the species we have been speaking of. *Scolopax Javensis* has eight on each side, which are extremely narrow, and very stiff."

The theory appears to be, that, as the bird sweeps downwards in its flight, the outer tail-feathers, having their outer margins advanced, are made to vibrate, or rather their inner webs, with their peculiar rays, are caused to vibrate, and hence the neighing sound.

I have tried the experiments described above; I have blown on the feather, and attached it to a steel wire and a stick as directed, but have quite failed to produce the vibrating or neighing sound of the Snipe. When the web of almost any firm feather is blown upon a low vibrating sound can be produced; and such a sound is stronger than usual when a tail feather of the Common Snipe is used, arising apparently from the fact that the inner web is wide and firm, but the sound is so low that it cannot be heard many yards off. A louder sound is made when the feather is attached to wire; but I cannot recognise any strong resemblance it bears to that produced by the bird while descending through the air. In fact, a much nearer approach to this peculiar sound can be produced by rapidly waving backwards and forwards, with short strokes, a cane two or three feet long.

But the conditions of nature seem very imperfectly complied with in these experiments. In the bird, the tail-feathers are rigidly spread, the inner overlying the outer ones, so that any vibrating motion of the latter must be much restricted, if not entirely subdued, by the inner ones, which must, however much the tail is spread, overlie the others to a considerable extent. The tail-coverts, too, are very long, and will likewise tend materially to retard any such movements of the webs or shafts of the retrices. An isolated feather attached to a long piece of steel wire but feebly represents the same feather in its place in the living bird. Then, while the feather so prepared is drawn through the air, the arm has to "make some short movements

or shakings," so "as to represent the shivering motion of the wings during flight." Such movements of the arm are undoubtedly necessary to the production of the tremulous or vibratory character of the sound, by making the breaks in it that give the neighing or bleating effect. But, granting that the "shakings" of the arm represent ever so truly the "shiverings of the wings," what can this have to do with the noise that is supposed to be made by the tail-feathers during the bird's descent through the air? The bird descends because the flight movements of the wings have ceased; the peculiar curve and inclination of the descent are regulated by the out-spread tail; the sweep itself is perfectly steady and uninfluenced by a tremulous, vibratory or "shivering" motion of the wings. There can be no doubt, that while rushing through the air in rapid descent, with firm set tremulous wings and the tail rigidly spread, the trunk of the bird is in extreme tension, and is as steady in its flight as an arrow.

These experiments, upon which much stress is laid, appear to have little real value. And in the characters of the so-called sonorous feathers themselves there is just as little, in my opinion, to justify the theory. It is said that the form of these feathers is peculiar, and that the inner web is wide, with the rays very long and strongly adherent to each other; and that the shaft is very strong and sabre-shaped. Such are undoubtedly the characters of the two outer tail-feathers of the Common Snipe; but in some of the other species there is scarcely any web at all. The feathers vary much in the different species; the shaft is, however, in all more or less sabre-shaped, and strong. But such is also the case in a great number of the waders, which certainly do not produce the peculiar sound made by the Snipe. In all these birds most of the tail-feathers partake of the above characters, and become more and more bent as they approach the sides. The width and firmness of the web vary much. In the Woodcock, as in the Snipe, it is wide, but not by any means so firm in the former as in the latter; the Great Snipe is stated to have four of these so-called sonorous feathers on each side; they are considerably narrower and softer than those of the Common Snipe. In the Jack Snipe the sabre form is slight and the web

comparatively soft. The tail-feather of this species is stated, in Meves's paper, "to differ considerably from that of the others," and "that it gives upon experiment no humming sound." Now, this species is known to produce when on the wing, during the breeding season, a peculiar noise, which is evidently of the same nature as the drumming in question. The late Mr. Wolley is the authority for this. That gentleman, when on the great marsh at Muonioniska, heard "an extraordinary noise, unlike anything that he had heard before; but soon found that it was made by a small bird flying at a wild pace, at a great height, over the marsh. I know not," continues this gentleman, "how better to describe the noise than by likening it to the cantering of a horse in the distance over a hard hollow road; it comes in fours with a similar cadence." It was not long after it was heard that he ascertained that the "remarkable humming noise" in the air was made by the Jack Snipe.

The Painted Snipe of India has the tail very short, and the lateral feathers of it do not differ much, either in form or texture, from the others; they are all soft. The greatest deviation in the form of these feathers is found in the Pin-tailed Snipe of India (*Gallinago stenura*, Temminck). This species, which greatly resembles the Common Snipe, has twenty-two tail-feathers, seven or eight of which, on each side, are exceedingly attenuated, the web being scarcely wider than the shaft, which is stiff and sabre-shaped. The lateral feathers are not only reduced to a little more than mere shafts, but are much shorter than the central ones, of which there are six or eight, and are almost concealed by the tail-coverts, which extend beyond them. This species is evidently very closely allied to, if not the same as, *Scolopax Javensis*, which is stated, in Meves's paper, to have eight similar lateral feathers on each side, which are considered to be sonorous instruments. Other species have the same almost webless feathers at the sides of the tail, varying only in number. Here, then, we see a species in which the so-called sonorous or "musical feathers" do not possess the structure, firmness of web, and length of the rays, which appear to be mainly relied on as the sound-producers; though the rigidity and form of the shaft are

in some way or other apparently thought to have some influence in the production of the sound, independently of the rays or web. Were these feathers sonorous instruments, we should expect to find a greater uniformity in their structure. But, in fact, the tail-feathers of the true Snipes are remarkable for their diversity; so much so, indeed, that these birds have been divided into four groups, and this mainly on account of a difference in the number and form of these feathers.

The first group has from sixteen to eighteen tail-feathers; the four lateral ones being narrow. The Great Snipe belongs to this division.

The second has from twenty to twenty-eight feathers in the tail, the lateral feathers, five to ten on each side, being highly attenuated and stiff. *Scolopax stenura* and *S. Javensis* are types.

The third has from fourteen to sixteen caudal feathers, of nearly uniform width. The Common Snipe belongs to this group.

The fourth is characterized by twelve uniform tail-feathers; the type being the Jack Snipe.

If these feathers had been modified for the production of sound, surely there must have been a greater similarity of plan and structure.

But the Snipes are not the only birds that produce this peculiar tremulous murmuring sound. The Woodcock, in spring, during the breeding season, makes two very strange sounds, which I have frequently heard both in Norway and in Scotland. One of these sounds is a shrill chirp produced twice, or rather a sort of squeak, like that made with a corkscrew when entering the cork, a noise to set the teeth on edge. The other sound is a kind of croaking, of no long duration, but repeated at intervals. These sounds are chiefly heard in the evenings while the birds are flying. On one occasion, in Norway, we heard them most distinctly; the Woodcocks all the time flying to and fro, in the twilight, about ten o'clock P.M., over the tops of the trees of the wood where they were nesting. On another occasion, we heard them with equal distinctness near Dunrobin, in Sutherlandshire. This was on the 19th of May, 1849, and likewise in the

evening; the birds all the while flying backwards and forwards over the tops of the trees, not far from the spot where we found a nest. Unfortunately, on neither occasion had we a sufficiently clear view of the birds to see if the croaking sound was accompanied by any quivering motion of the wings. Therefore I can only conjecture how it is produced; but from the character of the sound itself, it is certainly akin to that made by the Snipe.

The Wood Sandpiper (*Totanus glareola*) produces a sound, during the breeding season, perfectly comparable to the murmuring or neighing of the Snipe. I have twice had the opportunity of hearing the Wood Sandpiper; once, when I took its nest at Prestwick Car, in June, 1853, and again at Gosforth Lake, on the 10th of May, 1857. On the first occasion, I observed the bird for a long time flying high in the air before the nest was found; and afterwards while watching its return, previous to shooting it. It kept, at a considerable elevation, wheeling about and descending at intervals, in wide circles, with outstretched, quivering wings, like the Snipe, and producing at the same time a similar tremulous note, but the motion of the wings was more rapid, and the sound was shriller and more musical, amounting almost to a sort of whistle. This was repeated over and over again, and sometimes when the bird was at a great elevation. When I heard it at Gosforth it was precisely under the same circumstances; but I failed to detect the nest, though I have little doubt it was somewhere in the neighbourhood.

There is nothing peculiar to distinguish the outer tail-feathers of this species from those of the Common Sandpiper, the Dunlin, and Redshank, none of which are known to produce this peculiar sound. In all these the feathers are sabre-shaped, with the shaft rigid, quite as much so as in the Snipe.

A sound of the same nature is produced by the Peewit, when disturbed by anyone approaching its nest, or more particularly its young. It then dashes itself downwards in short, circling swoops, occasionally advancing quite close to the intruder. This action is accompanied by short forcible strokes of the wings, similar to the vibratory motion of the wings of the Snipe when emitting its well-known neighing or murmuring sound. And

while this beating of the wings continues, the drumming or neighing sound is distinctly heard, quite similar to that produced by the Snipe, but, so to speak, coarser; corresponding, as it were, to the slower motion, the form, and greater expanse of the wings.

Macgillivray describes very correctly these movements and sounds of the Peewit. This author says, "during the whole of the breeding season, even when not disturbed, they (the Peewits) may be seen flying about, hovering, gliding, slanting, and curving along; shooting through the air with a continuous noise of the wings, or causing an undulating loud hum by flapping them strongly, and at the same time emitting curious modifications of their usual cry. This behaviour is no doubt analogous to the aerial rambles of the Snipe at the same season."

On carefully comparing these peculiar movements of the Peewit, the forcible short strokes of its wings, and the accompanying sound (in this case undoubtedly produced by the wings), with the similar movements and vibratory sound made by the Snipe, it is quite impossible to doubt the origin of the neighing of the latter bird.

Many cases might be cited in which the whirring of the wings strongly resembles the neighing or bleating of the Snipe. The rapid movements of the wings of the Grouse, on rising, make a noise of this nature; and the Pheasant, too, while paying his addresses to the female in the spring, rises up two or three feet in the air, and with short rapid strokes of his wings produces a quick drumming noise. But enough has been said to explain my views of the "neighing" of the Snipe.

I have failed to produce this peculiar sound made by the Snipe, though I endeavoured to do so by experiments, after the plan adopted and recommended by M. Meves. And we have seen that the tail-feathers, supposed by their peculiar form and structure to be adapted to the production of this sound, are too much diversified for the accomplishment of one and the same end, namely, the production of sound, unless it be assumed that such an instrument may have its powers increased by opposite means, namely, either by having the web broad, and of a firm

texture, or by having it reduced to the greatest possible extent.

It ought not to be forgotten, too, that the sound is audible at a great distance, and even when the bird has risen high into the air. No sound that could be produced, under any circumstances, by such feeble instruments as the lateral tail-feathers of the Snipe, instruments not larger than the wings of a Dragonfly, could be heard at any considerable distance. And it can scarcely be doubted by anyone that the wings of a Snipe vibrating rapidly will produce some sound or other, louder than any that could be made by a pair of small tail-feathers of a bird rushing down through the air. Only *one* sound, however, is heard. How is it, then, that the lesser noise is audible and not the greater? That while the sound produced by such feeble instruments as the lateral tail-feathers is easily heard, that made by the rapid vibrations of the comparatively powerful wings is inaudible? The only answer to these questions would seem to be that the neighing or bleating of the Snipe results from the action of the wings; and that any sound produced by the tail-feathers is inaudible.

Variety. Sabine's Snipe. G. Sabinii, (*Vigors.*)

Scolopax Sabinii, Bewick, Hist. Brit. Birds, Ed. 1847, II., 126.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 39.

It appears by Mr. Selby's "Illustrations of British Ornithology" that as his work was passing through the press he received "a fresh specimen of this rare Snipe from Morpeth."

I am cognisant of no other instance of the occurrence of this variety in our district.

Degland and Gerbe give this as a variety of the Common Snipe; and indeed it is now generally so considered. I saw, many years ago, the original specimen from which Vigors made his description, and am now, as I was then, perfectly satisfied that it is a mere variety as to colour of the Common Snipe.

19. Jack Snipe. G. gallinula, (*Linnæus.*)

Scolopax gallinula, Bewick, Hist. Brit. Birds, Ed. 1847, II., 132.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 33.

An autumn and winter visitant. Less numerous than the Common Snipe, it arrives in October and departs in spring. I have seen it at Prestwick Car and other places at the beginning of May, when the Common Snipe and Redshank have eggs.

109. CALIDRIS, *Illiger.*

20. Sanderling. C. arenaria, (*Linnæus.*)

Calidris arenaria, Bewick, Hist. Brit. Birds, Ed. 1847, II., 4.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 491.

An autumn and winter visitant; plentiful on our coast in autumn, but much rarer in the winter. The earliest arrivals, which take place in July and August, retain, when they first appear, more or less of their summer plumage.

The late Mr. Dent, of Streatlam, shot, at Seaton Snook, at the mouth of the Tees, in the summer of 1833 or 1834, a specimen in complete summer plumage. It rose from a nest, which that gentleman supposed to belong to it; the nest contained four eggs much incubated, one of which is now in my possession, along with the supposed parent bird. The egg is like that of the Ring Dotterel, so that I cannot but believe that there must have been some mistake; the bird, nevertheless, has all the appearance of a breeding individual.

I have shot the Sanderling in full summer dress, at Burgh Marsh, Cumberland, on the 30th of May, at which time this species was in flocks, and certainly not breeding.

In 1863, Mr. William Proctor received from Iceland two specimens of this bird in complete summer plumage, along with three eggs, stated by his Icelandic correspondent to belong to these birds, both of which, as well as one of the eggs, I now possess. The latter resembles the egg of the Ring Dotterel, but is considerably smaller, and less glossy. I can see no reason to doubt

the authenticity of these eggs, another specimen of which is, I believe, in the collection of the Rev. Dr. Tristram.

In Dr. Richardson's "Fauna Boreali-Americana," it is stated that the Sanderling breeds in Hudson's Bay, and that it makes its nest, rudely, of grass, in marshes; that it "has four dusky-coloured eggs, spotted with black." This description, as far as it goes, corresponds exactly to the characters of the eggs received by Mr. Proctor. The Ring Dotterel makes no nest; it deposits its eggs amidst gravel or on the bare sand.

110. TRINGA, *Linnæus*.

21. KNOT. T. CANUTUS, *Linnæus*.

Tringa cinerea, Bewick, Hist. Brit. Birds, Ed. 1847, II., 84.

,, *canutus*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 52.

A common autumn and winter visitant, arriving on our coast in August, and remaining till spring. A few adults make their appearance sometimes as early as July; these are usually in their faded summer dress.

At Fenham Flats, in the neighbourhood of Holy Island, the Knot often appears in large numbers in the autumn and winter months.

The individual from which Mr. Bewick made his figure is in my collection.

22. PURPLE SANDPIPER. T. MARITIMA, *Brünnich*.

Tringa maritima, Bewick, Hist. Brit. Birds, Ed. 1847, II., 79, 81.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 88.

An autumn or winter visitant; arrives on the coast with the Knot, in September. Single specimens are met with, occasionally, earlier. I have killed it in August, and Mr. C. M. Adamson shot one on the 19th of July. These early birds retain their worn summer dress. It is commonest during the autumn and winter months, and has been killed up to the middle of May. I have an example that was shot at St. Mary's Island, on the 18th of that

month, and Mr. C. M. Adamson shot one on the 9th; both these specimens had acquired their summer plumage.

The late Mr. Wolley took, on the Faroe Islands, at the end of June, 1849, a young individual which had not attained its full plumage, a considerable portion of down still remaining on the head and on various parts of the body. One of the parents was shot at the same time, which was, as well as the young individual, kindly presented to me by my late lamented friend.

Mr. Selby states, in his "Illustrations of British Ornithology," that the Farne Islands are a favourite resort of the Purple Sandpiper, and it sometimes happens that a few stragglers are left at the period of the vernal migration, remaining through the summer and breeding on the smaller islets. He continues, "I have hitherto been unable to obtain the eggs, but have met with the young more than once in the month of June." There is probably some mistake here. The egg has never been taken on the Northumberland coast, and I know of nothing to support Mr. Selby's belief that this species ever breeds at the Farne Islands.

111. PELIDNA, *G. Cuvier.*

23. Pigmy Curlew. P. subarquata, (*Güldenst.*)

Tringa subarquata, Bewick, Hist. Brit. Birds, Ed. 1847, II., 73.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 47.

An autumn visitant; frequent on our shores in September. The young only arrive; they are all in the first dress, and depart before they attain the winter plumage. I have never seen an adult bird taken in our district, either in winter or summer dress. I am indebted to Mr. Blyth for adult specimens, which were bought in the flesh in Calcutta market. The specimen figured by Bewick is in my possession: it was shot near Sunderland, and is in the first plumage.

It is stated that the Pigmy Curlew has been found breeding in two localities in the north of Scotland (Grey's "Birds of the West of Scotland"), upon what appear to me insufficient grounds. One of the localities alluded to is the marshy land by the side of Loch Spynie. I frequently and carefully searched this ground

in 1850–52–53, but never met with the Pigmy Curlew there in the breeding season. I found the nest of the Shoveller, Water Rail, Redshank, and Dunlin; and would suggest that Mr. Grey's correspondent has probably mistaken the eggs of the last for those of the Pigmy Curlew.

24. Dunlin. P. cinclus, *Linnæus.*

Tringa variabilis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 75, 77.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 81.

A resident, and the commonest of our Sandpipers. It assembles in large flocks on the coast in autumn, when its numbers are augmented by migrants from other countries.

This pretty species bred regularly at Prestwick Car, where, in a single day in April, 1855, I found four nests. When disturbed from its eggs it does not move far away, but keeps running about, making at intervals a curious purring noise.

25. Pectoral Sandpiper. P. maculata, (*Vieillot.*)

Tringa pectoralis, Yarrell, Hist. Brit. Birds, Ed. 2, III., 77.

Pelidna maculata, Degland et Gerbe, II., 200.

A very casual and rare visitant. The only authenticated individual that has occurred in the district was shot on Whitley Sands, on the 27th of June, 1853, by Mr. Robt. Duncan, and is now in the possession of Mr. C. M. Adamson; it is in summer plumage. Notice of this capture appeared in the "Zoologist," 1855, p. 4808.

A specimen in my possession, presented to me by Mr. Henry Gornall, of Bishop Auckland, was said by him to have been shot near that town.

In Harting's "Handbook of British Birds," p. 141, is mentioned the occurrence of one "on the Northumberland coast, shot by Mr. W. Proctor, of Durham; hitherto unrecorded."

Mr. Proctor, in a letter dated June 25, 1873, says, "I do not recollect ever shooting one. A good many years ago a person sent to me several birds to stuff for him, which had been shot

near Boulmer Point, on the Northumberland coast, such as Dunlins, Purple Sandpipers, Sanderlings, Pigmy Curlews, etc., and there was one which we thought to be the Pectoral. I cannot say whether it was or was not it. The person got them back, he is now dead, and I do not know where the birds are now."

26. Little Stint. P. minuta, (*Leisler.*)

Tringa minuta, Bewick, Hist. Brit. Birds, Ed. 1847, II., 83.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 66.

An autumn visitant, arriving in our district in September, but not remaining over the winter.

A specimen, in the first plumage, was shot at Prestwick Car, September, 1832, by Mr. Thomas Atthey, and is now in my collection. On the 12th of September, 1843, Mr. C. M. Adamson shot one, also in the first plumage, in Northumberland. And on the 3rd of September, 1849, I shot an immature example on Whitley Sands. Another was obtained by Mr. Richard Howse, which was killed on South Shields Sands, September, 1853. Of late years I have met with it occasionally in September on the sands at Newbiggin-by-the-Sea.

27. Temminck's Stint. P. Temminckii, (*Leisler.*)

Tringa Temminckii, Yarrell, Hist. Brit. Birds, Ed. 2, III., 70.
Pelidna ,, Degland et Gerbe, II., 205.

An autumn visitant; rare in the district. It appears in September.

Several captures have occurred. Two were shot at Prestwick Car, in September, 1832; they were not associated together. In September, 1835, another example was obtained at the New Water Pond on Newcastle Town Moor. On the 18th of June, 1839, a specimen, in the summer plumage, was shot by the late Mr. Richard Reay, of Berwick Hill, at a horse pond in that neighbourhood; and another was killed by the same gentleman, at the same place, on the 9th of September, 1845. The above five examples are all in my collection. Two specimens in the

collection of Mr. C. M. Adamson were shot in the neighbourhood of Newcastle; one, in summer plumage, on the 25th of May, 1843, the other, a young bird, on the 11th of September, 1844.

112. MACHETES, *G. Cuvier.*

28. Ruff. M. pugnax, (*Linnæus.*)

Tringa pugnax, Bewick, Hist. Brit. Birds, Ed. 1847, II., 87.

Machetes ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 645.

The Ruff is a rare spring-and-autumn migrant. Before Prestwick Car was drained this beautiful species was not by any means uncommon there in autumn; and occasionally appeared in large numbers. I have noted five captures of it in that locality, all in summer dress, namely, two males and three females; and I took, on the 3rd of June, 1853, a nest with the full complement of eggs. I am informed by Mr. C. M. Adamson that another nest occurred in the same locality.

The adult winter plumage is rarely met with in the district. I have only a single individual in this dress captured here, and I am indebted to Mr. C. M. Adamson for it; it was shot at Hauxley, in the winter of 187–. The young, in the first plumage, have been frequently killed on the Newcastle Town Moor, and on the Northumberland coast.

Mr. Selby says in his catalogue that he had "killed several of the young birds and an adult in winter plumage, on the shore near Budle Bay and the slake or ooze interposed between the mainland and Holy Island, about the end of September or beginning of October." It has been observed at Boldon Flats, and in May, 1859, I saw, at Gosforth Lake, a pair of adult birds, male and female; the former had a white ruff.

The Red-legged Sandpiper (*Tringa Bewickii*, Montagu,) figured and described by Bewick, is undoubtedly an adult Ruff, without the collar of feathers. I have a male specimen, shot at Prestwick Car, on the 18th of April, without a trace of the ruff; and in other respects agreeing with the figure and description of Bewick's *Tringa*, or Red-legged Sandpiper.

113. TOTANUS, *Bechstein.*

29. Greenshank. T. griseus, (*Brisson.*)

Totanus glottis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 108, 110.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 618.

This is a rare autumn visitant, arriving in August and September, and soon leaving, probably going southward. Those that have been captured are mostly in first plumage; a specimen, however, in Mr. C. M. Adamson's collection, which was shot at Fenham Flats, on the 14th of November, 1845, is in the winter dress. Two examples in my collection, in the first plumage, were shot at Prestwick Car, on the 18th of August, 1831.

30. Spotted Redshank. T. fuscus, (*Linnæus.*)

Totanus fuscus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 94.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 587.

A rare autumn or winter visitant. In 1830, a specimen was shot at Prestwick Car; and on the 26th of August, 1831, another was killed at St. Mary's Island; these are both in the first plumage, and are in my collection. On the 12th of August, 1840, a third specimen was killed at Blanchland, as I am informed, by Mr. William Proctor. In Mr. C. M. Adamson's collection there is an immature example of this fine species, that was shot at Prestwick Car, in August, 1848. A young individual in the Newcastle Museum was killed at Jarrow Slake.

31. Redshank. T. calidris, (*Linnæus.*)

Totanus calidris, Bewick, Hist. Brit. Birds, Ed. 1847, II., 96.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 591.

A resident species, and very common in autumn and winter on our sea shores. It constantly bred at Prestwick Car, where I have seen many nests, and where, on one day in April, 1855, I saw fifteen breeding birds in the air at one time. When I first knew the Car, in my boyhood, the Redshank was not by any means so

abundant as it was afterwards. This increase in the numbers, perhaps, may be accounted for in some degree by the Car having been partially protected.

32. Wood Sandpiper. T. glareola, (*Linnæus.*)

Totanus glareola, Bewick, Hist. Brit. Birds, Ed. 1847, II., 101.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 601.

A rare spring-and-autumn migrant, arriving early in May, and leaving in August or September. In Selby's catalogue three captures are recorded. The first at Ellingham, in the autumn of 1828; this bird was in the collection at Twizell. The second bird was taken at Prestwick Car, in 1830, and is now in the Newcastle Museum; and the third was in the possession of the late Mr. Edward Backhouse, and was shot at the White Mare Pool, in the county of Durham.

In my journal there are nine entries of the occurrence of this species; of these one was at Gosforth, all the rest at Prestwick Car. At the latter place, I took its nest and eggs on the 3rd of June, 1853, when my companion shot the adult male, and thus the eggs were fully authenticated. I believe this is the only time the nest has been taken in England.

On the 19th of June, 1845, a mature bird was shot by the late Mr. Richard Reay, at Prestwick Car. There can be little doubt that this was also breeding there. My friend, Mr. Thomas Atthey, likewise killed three examples at the same place, on the 4th of August, 1832; two of which were kindly presented to me, and now form part of my series of this species.

Recently, another specimen was shot on the Newcastle Town Moor, by Robert Duncan, Jun., on the 1st of September, 1873. This bird was in its first plumage.

The flight of the Wood Sandpiper is peculiar when disturbed. It rises to a considerable height, moving rapidly in wide circles, and occasionally rising and descending with extended tremulous wings, and making a noise similar to that produced by the Snipe, but shriller. This habit is more particularly referred to under the remarks on the Snipe.

33. Green Sandpiper. T. ochropus, (*Linnæus.*)

Totanus ochropus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 99.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 595.

A rare autumn visitant, appearing most frequently in July and August.

A specimen, in the first plumage, was killed on the 25th of July, 1834, in Jesmond Dene; and in 1838, an example, in the summer dress, was shot at Streatlam Park; both these specimens are in my possession. I am indebted to Mr. C. M. Adamson for a fine specimen, in the first plumage, found dead in the garden in front of that gentleman's house, at Jesmond, on the 19th of August, 1855. An example, half-changed from summer to winter dress, which was shot at Prestwick Car, on the 17th of August, 1852, is in Mr. C. M. Adamson's collection. Several other captures might be mentioned, but it seems unnecessary to particularize more.

In the downy state, this species has the under parts white; the upper parts are of a pale warmish brown, with three dark streaks on the crown of the head, one central, two lateral; on the back there is a wide longitudinal central dark streak, and a narrow dark streak on each side; the tail is dark.

The above description is from a specimen I received from my late friend, Mr. H. W. Wheelwright, from Sweden.

114. ACTITIS, *Boie.*

34. Common Sandpiper. A. hypoleucos, (*Linnæus.*)

Totanus hypoleucos, Bewick, Hist. Brit. Birds, Ed. 1847, II., 103.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 607.

One of our commonest Sandpipers, and a regular spring-and-autumn migrant, breeding amidst the low herbage or on the bare gravel by the margins of streams.

The usual time of departure of this species is September; but it would appear that stragglers occasionally remain much longer,

for in 1830 I received a specimen that was shot at Ford, Northumberland, on the 16th of November. I have known this species killed as early as the 28th of March. I am informed by Mr. Thomas Atthey that a specimen which he wounded at Prestwick Car took to the water, and, diving freely, escaped.

The Spotted Sandpiper of Bewick is merely a Common Sandpiper in summer plumage.

The two individuals mentioned in the "Zoologist" by Mr. Duff, 1849, p. 2499, and 1851, p. 3036, as occurring near Bishop's Auckland, were, I am informed by this gentleman, not Spotted but Green Sandpipers.

115. PHALAROPUS, *Brisson.*

35. Grey Phalarope. P. fulicarius, (*Linnæus.*)

Phalaropus platyrhynchus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 159, 160.

,, *lobatus*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 130.

A casual visitant. I have four specimens, killed on the Northumberland coast. One was shot on the 1st of November, 1834; another in December, 1835; the third, in first plumage, November 22nd, 1838; and the fourth in December of the same year, in mature winter plumage.

Mr. Selby records the capture of three specimens, all likewise in Northumberland. Several others have occurred, and it has likewise been captured in the county of Durham. It is more frequently met with than the following species.

116. LOBIPES, *G. Cuvier.*

36. Red-necked Phalarope. L. hyperboreus, (*Linnæus.*)

Phalaropus hyperboreus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 157.

,, ,, Yarrell, Hist. Brit. Birds, Ed. III., 135.

The Red-necked Phalarope is a casual visitant, and rarely occurs. On the 16th of August, 1832, a specimen, in the first

plumage, was shot at Tynemouth, and is in my collection; another young bird, also in my collection, was killed near Cullercoats, on the 22nd of November, 1838.

Mr. Selby states in his catalogue that the only specimen he had met with was one killed upon the coast, near to Alnmouth, in the spring of 1828.

Family. RECURVIROSTRIDÆ, *Bonaparte.*

117. RECURVIROSTRA, *Linnæus.*

37. Avocet. R. avocetta, *Linnæus.*

Recurvirostra avocetta, Bewick, Hist. Brit. Birds, Ed. 1847, II., 58.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 624.

A casual visitant. This beautiful bird has been only once taken in the district; and its capture is recorded in Mr. Selby's catalogue, in which it is mentioned that "a specimen was killed not long ago at Hartley, and is now in the possession of Mr. Wardle."

Family. RALLIDÆ, *Leach.*

118. RALLUS, *Linnæus.*

38. Water Rail. R. aquaticus, *Linnæus.*

Rallus aquaticus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 137.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 110.

Not uncommon, though rarely seen, on account of its retiring habits. It is a resident, but to a considerable extent is migratory, and is most numerous during autumn and winter. Its nest has occurred in the district, and was taken by Mr. C. M. Adamson, on the 12th of July, 1867, at Grindon Lough; it was built amidst reeds, about knee-deep in water, and contained seven eggs.

This species varies much in size. I have two specimens, which

were measured before they were skinned. Their measurements were as follows:—

	LARGE SPECIMEN.	SMALL SPECIMEN.
Length	12 inches.	$10\frac{1}{2}$ inches.
Extent of Wings	$16\frac{1}{2}$,,	$14\frac{1}{2}$,,
Bill	$1\frac{3}{4}$,,	$1\frac{1}{2}$,,
Tarsus to end of Middle Toe	$4\frac{1}{8}$,,	$3\frac{1}{4}$,,

119. CREX, *Bechstein.*

39. Corn Crake. C. pratensis, *Bechstein.*

Gallinula crex, Bewick, Hist. Brit. Birds, Ed. 1847, II., 141.

Crex pratensis, Yarrell, Hist. Brit. Birds, Ed. 2, III., 92.

A spring-and-autumn migrant, common throughout the district. It arrives in April, and departs in September and October. Last year (1872) very few Corn Crakes appeared in the neighbourhood of Newcastle.

120. PORZANA, *Vieillot.*

40. Spotted Crake. P maruetta, (*Brisson.*)

Gallinula porzana, Bewick, Hist. Brit. Birds, Ed. 1847, II., 143.

Crex ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 97.

A resident, and to some extent migratory. It occasionally breeds in the district. A nest of eggs was taken at Prestwick Car, many years ago, by the gamekeeper of the late Sir Matthew White Ridley, Bart. A few years ago another nest of young, just hatched, was taken at the same place by Mr. Turner, of Prestwick. And, according to Mr. W. Proctor, it bred some years ago at Framwellgate Car, Durham.

121. GALLINULA, *Brisson.*

41. Water Hen. G. chloropus, (*Linnæus.*)

Gallinula chloropus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 148.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 114.

A resident species. Common everywhere in ponds and streams that abound with aquatic plants.

122. PORPHYRIO, *Barrère.*

42. Purple Gallinule. P. cæsius, *Barrère.*

Porphyrio cæsius, Degland et Gerbe, Orn. Europ., II., 265.

,, *hyacinthinus,* Bree's Birds of Europe, IV., 77.

A casual visitant. A specimen of this bird was taken alive at Boldon Flats, in August, 1863. I saw it shortly after its capture. It was very lively, and in good condition; the plumage was quite perfect, and showed no sign of the bird having been in confinement; notwithstanding, it may probably have escaped from some ornamental water.

Another individual was caught near Ponteland, August, 1873. It is still living in confinement in Newcastle.

123. FULICA, *Linnæus.*

43. Coot. F. atra, *Linnæus.*

Fulica atra, Bewick, Hist. Brit. Birds, Ed. 1847, II., 152.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 123.

The Coot is a resident, and, though common, is not so generally distributed as the Water Hen. It is found in most large pools and loughs. It breeds at Wallington and Gosforth, and nested quite commonly at Prestwick Car before it was drained; it is plentiful in the Northumberland lakes.

I saw a specimen shot on the river, from the bridge, Newcastle-on-Tyne, in 1830.

Family. ARDEIDÆ, *Leach.*

124. ARDEA, *Linnæus.*

44. Heron. A. cinerea, *Linnæus.*

Ardea cinerea, Bewick, Hist. Brit. Birds, Ed. 1847, II., 36.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 508.

A common resident, but less abundant than in former time. There are still, however, heronries in the district: there is one at

Chillingham, and another at Harbottle, on the Coquet, of about twenty nests. There is also a small heronry on Lord Redesdale's estate, on Redewater; another, of ten or twelve nests, at Unthank, on South Tyne. Many years ago there was a heronry at Ravensworth Castle, county of Durham. I am informed by the Rev. G. C. Abbs that in the year 1814 there was a nest of the Heron at Cleadon House, and also one at West House. Mr. William Proctor states that he saw, at Cocken, on the Wear, a nest of young Herons. Nests also occur at Sweethope, and at East Nook, near Elsdon.

In Wallis's "History of Northumberland," Vol. I., p. 324, it is stated that "the Ash-coloured Heron, or Hernshaw, is common. It builds *gregatim* upon trees. On a farm of Sir Harry Grey's, by the western margin of a trout streamlet, called Glen, on the Cheviot, there is usually a fine heronry, at the vernal revolution. It is very entertaining to see the polity, the pleasures and amusements of this piscivorous community. Some are sentinels, and take their post on the side of a sunny bank, to see that no danger is near, while the rest of the society are at work, some in build- their little temporary city, some in laying their eggs, some in attending their young, others up above the thighs in water, exploring food for them, returning from the Glen, and other neighbouring streams, with a constant supply of fish provisions. An universal harmony reigns among them; not a bird to be seen but contributes its utmost to the happiness of the rest, and to the prosperity and well-being of the rising generation."

125. ARDEOLA, *Bonaparte.*

45. Little Bittern. A. minuta, (*Linnæus.*)

Ardea minuta, Bewick, Hist. Brit. Birds, Ed. 1847, II., 52.

Botaurus ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 533.

This is an extremely rare, casual visitant. A mature male was shot at Blagdon, near Newcastle, on the 12th of May, 1810: this specimen is now in the Newcastle Museum, and is the individual figured by Bewick. Another example was killed in April,

1859, in the garden at Denton Hall, three miles west of Newcastle, and is in the possession of Mr. Hoyle. A third individual was shot at Benridge, Woolsington, Northumberland, in 1866, and is in the collection of Mr. C. M. Adamson: this specimen is a mature male.

126. BOTAURUS, *Stephens.*

46. Bittern. B. stellaris, (*Linnæus.*)

Ardea stellaris, Bewick, Hist. Brit. Birds, Ed. 1847, II., 47.

Botaurus ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 539.

The Bittern is a rare, casual visitant. It appears to have been pretty abundant in the marshy regions of Northumberland, before the moorlands were so extensively drained and cultivated. Wallis, in his "History of Northumberland," Vol. I., p. 323, says, "Most of our alpine mosses have its company," and that "a moss to the north of Many Laws, in the parish of Carham, is rarely without it."

There are four or five entries in my journal of the capture of the Bittern in Northumberland, and about the same number in Durham; and many others have occurred. A specimen was killed at Felton, November, 1871.

127. NYCTICORAX, *Stephens.*

47. Night Heron. N. Europæus, *Stephens.*

Nycticorax ardeola, Bewick, Hist. Brit. Birds, Ed. 1847, II., 55.

,, *Gardeni*, Yarrell, Hist. Brit. Birds, Ed. 2, II., 549.

This species is a very rare, casual visitant. It has occurred only twice in the district. The first is mentioned in Mr. Selby's "Report on the Ornithology of Berwickshire," published in the "Proceedings of the Berwickshire Naturalist Club," Vol. I., p. 254, where it is stated that "a fine specimen was killed some years ago, at the Hirsel, and presented to the Edinburgh Museum by the Earl of Holme." The second capture is also recorded in the "Proceedings of the Berwickshire Naturalist Club," 1870,

p. 174, by T. H. Gibb, of Alnwick, according to whom the specimen is an immature female, and was shot on the 24th of November, near to the confluence of the Cawledge Burn with the Aln.

Family. CICONIIDÆ, *Bonaparte.*

128. CICONIA, *Brisson.*

48. Stork. C. alba, *Willughby.*

Ciconia alba, Bewick, Hist. Brit. Birds, Ed. 1847, II., 32.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 554.

A casual visitant. In Wallis's "History of Northumberland," Vol. I., p. 336, it stated that a White Stork "was killed near Chollerford Bridge, in the beginning of the year 1766;" and the description there given of the specimen, leaves no doubt as to the species.

In May, 1866, I saw an example of the Stork at Prestwick Car; it was flying, at a considerable elevation, towards where I stood, accompanied by a friend. We concealed ourselves amidst the heather: the bird passed directly over our heads. I could distinctly see, aided by a small telescope, the outstretched head, the red of the beak and legs, and the black and white of the plumage. It settled by the margin of the Black Pool, in about one foot depth of water, at no great distance from where we lay concealed, and I had a good opportunity of examining it through my glass. It remained a few minutes, and then flew off in an easterly direction.

49. Black Stork. C. nigra, *Gesner.*

Ciconia nigra, Yarrell, Hist. Brit. Birds, Ed. 2, II., 558.

,, ,, Gould, Birds of Great Britain, Part XX.

A casual visitant. A specimen is recorded as having occurred near Hartlepool, August, 1852, by Christy Horsfall, in "The Zoologist," 1862, p. 8196.

129. PLATALEA, *Linnæus.*

50. Spoonbill P. leucorodia, *Linnæus.*

Platalea leucorodia, Bewick, Hist. Brit. Birds, Ed. 1847, II., 61.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 564.

A casual visitant. A fine specimen was shot at Fenham Flats, Holy Island, in May, 1857. I am indebted for this information to Edmond Crawshay, Esq., in whose collection the specimen is preserved. A notice of this capture appears in the "Transactions of the Tyneside Naturalists' Field Club," Vol. IV. p. 59.

I have a specimen, which was killed in Cumberland several years ago.

Family. TANTALIDÆ, *Bonaparte.*

130. FALCINELLUS, *Bechstein.*

51. Glossy Ibis. F. igneus, (*Gmelin.*)

Ibis falcinellus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 65.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, II., 571.

A casual visitant. Mr. Selby states, in his catalogue, "a specimen of this species, or *Tantalus viridis,* Latham, was killed a few years ago, on the banks of the Coquet, and is now in my possession."

Order VI. PALMIPEDES, *Latham.*

Family. PELECANIDÆ, *Vigors.*

131. SULA, *Brisson.*

1. Gannet. S. Bassana, *Brisson.*

Sula Bassana, Bewick, Hist. Brit. Birds, Ed. 1847, II., 372.

,, *alba,* Yarrell, Hist. Brit. Birds, Ed. 2, III., 489.

This fine bird is a resident on our coast, but it is not very common.

132. PHALACROCORAX, *Brisson.*

2. Cormorant. P. carbo, (*Linnæus.*)

Carbo cormoranus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 360, 363, 368.

Phalacrocorax carbo, Yarrell, Hist. Brit. Birds, Ed. 2, III., 480.

A common resident species. It breeds at the Farne Islands.

One day on feeding two Cormorants, that I kept in confinement, they both siezed hold of the same fish, one by the head, the other by the tail, and went on swallowing it until the fish entirely disappeared, the bills of the two birds meeting each other. What was to to be done? The difficulty was soon solved. One of the birds gaping very wide swallowed the other's head, but the latter feeling the situation anything but agreeable withdrew its head, leaving its share of the fish in the gullet of its competitor.

Two trained Cormorants, belonging to F. H. Salvin, Esq., of Whitmoor House, near Guildford, one nine years old, the other three, have never attained the summer plumage. I saw these birds last July, 1872; they were then in perfect winter dress.

The Rev. G. C. Abbs informs me that the Cormorant bred on Marsden Rock in the year 1813, and for several years afterwards.

3. Shag. P. cristatus, (*Fabricius.*)

Carbo cristatus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 369.

Phalacrocorax graculus, Yarrell, Hist. Brit. Birds, Ed. 2, III., 486.

The Shag is a resident. It breeds rarely at the Farne Islands, where its eggs were taken in June, about the year 1820, by the late Mr. John Laws and the late Mr. R. R. Wingate. George C. Atkinson, Esq., has also taken the eggs of this species at the Farne Islands, and presented them some years ago, along with his valuable collection of eggs, to the Newcastle Museum. Mr. James Sutton informs me, October 1, 1873, that the Shag nested this year on the Farne Islands.

Two adult birds with crests, in my collection, were shot on the Northumberland coast.

Family. PROCELLARIDÆ, *Boie.*

133. PROCELLARIA, *Linnæus.*

4. Fulmar. P. glacialis, *Linnæus.*

Procellaria glacialis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 225.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 619.

A rare casual visitant. Many years ago I found a specimen washed up on Whitley Sands. Another example in my collection was picked up alive on the sands near Whitburn, on the 11th of October, 1850; it was in a sickly condition, but not wounded. A second specimen was found dead in the same locality, March, 1869; and an example, now in the collection of Mr. Raine, of Durham, was picked up dead on the sands at Bamborough, November, 1872.

Mr. J. H. Gurney, Jun., informs me that he obtained a specimen of a Fulmar that was taken, in an exhausted state, on the beach at Sunderland, September, 1868; it weighed only fourteen ounces, was quite destitute of oil, and had not been shot or otherwise injured. The same gentleman received, in the following November, four other examples that had been captured off Scarborough by the fishermen; they took them by hand on the decks of their boats. This mode of capture quite accords with the account given by the Greenland whalers, who are able to procure any number of them when they are cutting or "flinching" the blubber, for then the "Mallemoke," as they call it comes to feed, and so intent is it on its repast that it will allow itself to be knocked over or captured by the hand.

134. PUFFINUS, *Brisson.*

5. Shearwater. P. Anglorum, (*Gmelin.*)

Puffinus Anglorum, Bewick, Hist. Brit. Birds, Ed. 1847, II., 227.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 631.

The Shearwater is a rare casual visitant. I know of the capture of but two individuals within the district; one was shot off Cullercoats on the 20th of May, 1870, and is now in the collection of Mr. C. M. Adamson; the other example is recorded in Mr. Selby's catalogue: it is there stated, "the only fresh specimen I ever obtained was one killed upon an excursion to the Fern Islands."

A specimen of a *Puffinus* was shot off Cullercoats, September, 1860, which somewhat resembles the above species, but is rather larger in size, the bill being one-quarter of an inch longer, the wings from the carpal joint to the end of the primaries half-an-inch at least, the tarsi and middle toe are also one-quarter of an inch longer than in *P. Anglorum*. The colour also differs considerably, the back being two shades paler and the whole of the under parts of the body having the feathers tipped with ash colour, whilst in the true *P. Anglorum* these parts are pure white. By some it may be considered to be the young of *P. Anglorum*, but as no English author has described the young of that species, and as Degland and Gerbe distinctly state that the underparts are white in the young of *P. Anglorum*, we may hesitate before concluding it to be the young of that species. This specimen, which is in my collection, was purchased from Mr. Duncan, bird-stuffer, Newcastle-on-Tyne.

In 1838, I saw another example in the same plumage, in the collection of the late Cuthbert Rippon, Esq., of Stanhope Castle.

6. Dusky Shearwater. P. fuliginosus, (*Strickland.*)

Puffinus major, Yarrell, Hist. Brit. Birds, Ed. 2, III., 624, (upper figure.)

,, *fuliginosus*, Degland et Gerbe, Ornith. Europ. Ed. 2, II., 381.

The Dusky Shearwater is a casual visitant on our coast, only three specimens appear to have been met with. The first was recorded by Mr. Strickland, in the "Proceedings of the London Zoological Society" (1832), p. 129. This individual was shot at the mouth of the Tees. The second specimen is described in Mr. Selby's "Illustrations of British Ornithology," Vol. II., p. 528, under the name of *Puffinus cinereus*, Stephens. This bird was shot on the Northumberland coast. The third specimen was obtained in August, 1873, on the Northumberland coast, and is in the collection of Mr. F. Raine, of Durham, who saw the bird shot.

135. THALASSIDROMA, *Vigors.*

7. Storm Petrel. T. pelagica, (*Linnæus.*)

Thalassidroma pelagica, Bewick, Hist. Brit. Birds, Ed. 1847, II., 232.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 647.

This interesting little bird, the child of the ocean, is a casual visitant: it occasionally occurs on our coast. I have notices of five captures of it in the district. One was found dead on the beach between South Shields and Sunderland, in 1835; another was killed with a stone, in Cullercoats Haven, on the 25th of June, 1836: these are both in my collection. Of the other three one is in the Newcastle Museum.

8. Leach's Petrel. T. leucorhoa, *Vieillot.*

Thalassidroma Leachii, Bewick, Hist. Brit. Birds, Ed. 1847, II., 230.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 643.

This, like the preceding species, is a casual visitant; but is

much the rarer of the two. I know of only three specimens that have been taken. One was shot near Benwell Boat House, on the Tyne, in November, 1828, and is now in the Newcastle Museum: this is the bird mentioned in Mr. Selby's catalogue. Another example was killed on the Tyne, opposite the Old Mansion House, Newcastle. And the third example was shot near Blyth, in 1837. The last two are in my collection.

Family. LARIDÆ, *Leach.*

136. STERCORARIUS, *Brisson.*

9. Skua. S. catarractes, (*Linnæus.*)

Lestris catarractes, Bewick, Hist. Brit. Birds, Ed. 1847, II., 216.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 602.

A rare autumn and winter visitant; occasionally seen on our coast in autumn. I have a specimen that was shot at Newton-by-the-Sea, on the 25th of October, 1833.

Some years ago, while shooting on the coast, at St. Mary's Island, with my late friends, Mr. Philip Stanton and Mr. William Kell, a Tern was wounded, and fell into the sea out of reach. We were watching it, and commiserating its cruel fate, when, as it drifted seaward, a Skua made its appearance, and quietly seating itself on the water, close by the struggling Tern, commenced at once, *sans cérémonie,* to devour it: thus mercifully the sufferer was speedily put out of pain.

10. Pomarine Skua. S. pomarinus, (*Temminck.*)

Lestris pomarinus, Yarrell, Hist. Brit. Birds, Ed. 2, III., 606.

Stercorarius pomatorhinus, Gould, Birds of Gt. Britain, Part VIII.

A rare winter visitant. I have several specimens of this species that were killed on the Northumberland coast; they are all in the first plumage. I have also two others in the mature dress, shot on the Tyne; one in 1830, the other on the 14th of September, 1846. Two examples that were in the collection of the late Mr. William Backhouse were taken off the Durham coast.

This species varies in the same manner as Richardson's Skua, having, like it, dark and pale varieties, not influenced by age or sex.

11. Richardson's Skua. S. parasiticus, (*Linnæus.*)

Lestris Richardsonii, Bewick, Hist. Brit. Birds, Ed. 1847, II., 219, 221.
,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 611.

An autumn and winter visitant, common in September and October; generally flying with the Terns, and preying on their industry and skill. It rests on the water, quietly watching the movements of the Terns, and as soon as the fish is captured the Skua make its appearance on the wing and goes in pursuit of the successful fisher; the chased bird screams with fear, and lets fall its prey, which is seized by the pilferer before it reaches the sea. On this the Terns disperse, and the Skua settling on the water again awaits its opportunity.

This species varies much in plumage. It is sometimes entirely of a dark dusky colour, and sometimes has most of the under parts white, while the upper parts are dusky; and between these two extremes specimens occur of every depth of tint; the under parts in different specimens becoming by degrees paler until they are entirely white, excepting a pale dusky band across the breast and vent. These varieties are all adult birds, and are in no degree influenced by age or sex. Dark and pale varieties occur in the nest plumage; at this early stage, however, the feathers of both the back and the under parts are tipped with russet brown, producing a transversely barred appearance. The neck and head are longitudinally streaked with the same colour, and the front half of the toes is black.

While in Norway, in 1833, I had a good opportunity of studying the varieties of this bird. We found it breeding on an island near Torghatten. One of the parents of a nest which we took was entirely of a dark dusky colour, the other had the under parts white; both parents of another nest were entirely dark. Richardson's Skua does not breed associated in colonies, as most of the Laridæ do, but in scattered pairs. It was therefore quite

easy to determine the parents of a nest, and to ascertain the colour of their plumage; and it was very obvious that these variations of colour had no relation to sex or age.

In my collection there are three or four specimens of, apparently, an accidental variety; these are pied with white on the throat, pinions, margin of the wings, and belly. Three are adult, and are from Iceland, and belong to the dark variety; one is immature, and was taken in our district; but it is remarkable that they are symmetrically pied, and all exactly in the same manner.

12. Arctic Skua. S. longicaudus, *Brisson.*

Lestris Buffonii, Yarrell, Hist. Brit. Birds, Ed. 2, III., 616.

Stercorarius longicaudus, Gould, Birds of Gt. Britain, Part VIII.

This is the rarest of the Skuas, and a mere casual visitant. An adult specimen was shot at Whitburn on the 24th of October, 1837; another, a young bird, was shot on the 1st of September, 1840, at Newbiggin-by-the-Sea; two others, immature, were shot, one at Blyth, and one at Tynemouth, on the 30th of September, 1841. These are all in my collection, as well as two individuals killed in the county of Durham, one of which is adult.

The nest plumage of this species resembles closely that of Richardson's Skua; but can always be distinguished by the two central caudal feathers, which in this are obtuse in the young state, while in Richardson's Skua they are always pointed. Bewick's second figure of Richardson's Skua has the two central tail feathers obtuse; it, therefore, probably represents the young of the Arctic Skua.

137. PAGOPHILA, *Kaup.*

13. Ivory Gull. P. eburnea, (*Gmelin.*)

Larus eburneus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 201.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 567.

A specimen of this rare casual visitant, said to have been shot

some years ago, off the mouth of the Tyne, came into the possession of Mr. Thomas Robson, of Winlaton Mill, and is now in the collection of Mr. Thomas Thompson, of Winlaton. I have seen the specimen; it is in mature plumage. An immature example of this rare species in the Sunderland Museum, was shot at Seaton Carew, in February, 1837.

138. LARUS, *Linnæus.*

14. Glaucous Gull. L. glaucus, *Brünnich.*

Larus glaucus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 191, 193.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 595.

An autumn and winter visitant; not uncommon on the coast during the winter months in the immature plumage. Adults are rare, though I have received two or three that were shot in our district.

15. Iceland Gull. L. leucopterus, *Faber.*

Larus Icelandicus, Yarrell, Hist. Brit. Birds, Ed. 2, III., 575.

,, ,, Gould, Birds of Gt. Britain, Part XXIV.

In Mr. Selby's catalogue it is mentioned that a specimen was shot at Holy Island, and was in his collection; and in his "Illustrations of British Ornithology," it is stated that he had obtained, on the Northumberland coast, three or four specimens, but all in immature plumage.

This is a rare casual visitant on the shores of Northumberland and Durham. The above captures are the only ones I know of.

16. Greater Black-backed Gull. L. marinus, *Linnæus.*

Larus marinus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 196, 198.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 591.

Not an uncommon resident; but most prevalent during autumn and winter. It does not breed in the district.

17. Lesser Black-backed Gull. L. fuscus, *Linnæus.*

Larus fuscus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 199.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 583.

A very common resident species in both counties. It breeds abundantly at the Farne Islands, and also inland in the uncultivated districts. Greenlee Lough is one of its stations, and another, I was informed by the late Dr. Charlton, is on a moss a few miles north of Bellingham.

In 1837 Dr. Charlton gave me two young Lesser Black-backed Gulls in the downy state, that were bred in the latter locality. One of these birds I presented to the late Mr. Sewell, of Jesmond Vale, where it lived in confinement for several years. On the death of that gentleman the bird passed into the possession of my friend, Mr. Robert R. Dees, of Wallsend, in whose grounds it lived until within the last five or six years when it died, having enjoyed a tranquil life extending over at least thirty years.

Another instance of the duration of life of the Gull has been communicated to me by my friend, Mr. D. M. Webster, of Edinburgh. He says, "James Tough, nurseryman, Kirkcaldy, county Fife, was the possessor of the Gull. I knew of its being in the nurseries from 1853 till 1870, seventeen years: it had been in his possession some ten or twelve years previous to 1853, and was not a young-looking bird when he received it. It died in 1870, and could not have been less than thirty years old, probably several years more; it had laid eggs for several years.

18. Herring Gull. L. argentatus, *Brünnich.*

Larus argentatus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 194.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 588.

This fine species, which is common, is a resident. It breeds at the Farne Islands, where however it is scarce. We took two nests of this species there in June, 1831.

In this locality the Herring Gull nests on the same island with the Cormorant. As our boat approached the island, the Cormorants left their nests in a body, and flew to an adjacent

elevated rock. The Gulls seeing their opportunity came at once and commenced to turn the eggs out of the unprotected nests of the Cormorants. On our nearer approach the Gulls also took to flight; we again pulled off a little to allow the Cormorants to return, which they immediately did, and settled on their nests. The Gulls now also returned and began to devour the eggs they had previously dislodged from the nests. By this manœuvre, there can be no doubt, the Gulls got a greater number of the eggs than they would have done had they endeavoured to eat them in the first instance.

19. Common Gull. L. canus, *Linnæus.*

Larus canus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 203.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 570.

Found in abundance on the coast during the whole year. It is therefore a resident, but it does not breed in the district.

20. Kittiwake. L. tridactylus, *Linnæus.*

Larus tridactylus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 205, 207.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 562.

The Kittiwake is a resident, though the greater number migrate. It breeds on the Pinnacles at the Farne Islands, and on the adjacent cliffs. It is abundant at Flamborough Head, and at the Bass Rock, where annually vast numbers are reared, and whence come no doubt most of those that visit our coast.

21. Black-headed Gull. L. ridibundus, *Linnæus.*

Larus ridibundus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 209, 212.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 550.

A resident, common in both counties. It breeds gregariously on the marshy borders of Loughs and Tarns, and is a great ornament to all wild moorland districts. But it is much to be feared that it will in time be exterminated, as it has fallen into disrepute with the game-preserver. On the 26th of May, 1859, I

counted by the margin of Fallowlees, a pool of no great extent, a little south of Simonside, four hundred eggs of this bird, but now, I believe, it no longer breeds in that locality. A few pairs used to nest at Prestwick Car. It breeds at Harbottle Tarn, at Sweethope, and at Pallinsburn; at the latter place, being well protected, it is as abundant as ever.

The Masked Gull of Yarrell is merely a variety of this species.

22. Little Gull. L. minutus, *Pallas.*

Larus minutus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 213.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 543.

This pretty little species is an autumn and winter visitant, frequenting our coast with considerable regularity in autumn and winter. In my collection are examples killed as early as the 2nd of September, and as late as the 6th of February; and I have specimens captured in the district in every state of plumage except that of summer. A few years ago the Little Gull was considered a rare bird in the Northern Counties; it is however by no means so uncommon as was usually thought. During one month in the autumn of 1868, Mr. J. H. Gurney, Jun., obtained ten specimens of this species on the Yorkshire coast.

139. STERNA, *Linnæus.*

23. Sandwich Tern. S. Cantiaca, *Gmelin.*

Sterna Cantiaca, Bewick, Hist. Brit. Birds, Ed. 1847, II., 177.

,, *Boysii*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 497.

A spring-and-autumn migrant, breeding at the Farne Islands. A few years ago it bred abundantly on Coquet Island.

24. Common Tern. S. hirundo, *Linnæus.*

Sterna hirundo, Bewick, Hist. Brit. Birds, Ed. 1847, II., 181.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2., III., 504.

A spring-and-autumn migrant; breeds abundantly at the Farne Islands. It also bred some time ago on Coquet Island.

I have frequently seen this species at Prestwick Car in the breeding season; and one that was shot there on the 27th of June, 1840, had the naked spaces on the breast of a breeding bird.

25. Arctic Tern. S. paradisea, *Brünnich.*

Sterna arctica, Yarrell, Hist. Brit. Birds, Ed. 2, III., 507.

,, *macrura*, Gould, Birds of Gt. Britain, Part VIII.

A spring-and-autumn migrant. Common. Breeding at the Farne Islands, and also some years ago at Coquet Island.

26. Roseate Tern. S. Dougallii, *Montagu.*

Sterna Dugallii, Bewick, Hist. Brit. Birds, Ed. 1847, II., 179.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 501.

This beautiful bird is a spring-and-autumn migrant, and is much rarer than the three preceding species. A few pairs breed annually at the Farne Islands.

While on an ornithological tour to the west coast, my attention was arrested by a Tern on the sands at Morecambe Bay; it was making the most extraordinary movements, and was evidently in trouble; so intent was it on rubbing its head from side to side upon the sand, that it allowed me to approach within gunshot. I killed the bird, and to my surprise found a cockle firmly fixed on the upper mandible, which was inserted nearly half-an-inch between the valves of the shell, and was indented by its grasp: a rather strange example of the biter bit.

Accidents of this nature are probably not unfrequent. Mrs. Edmond Crawshay met with a similar occurrence. As she was one day riding across Fenham Flats, with her father, they observed a Peewit in great distress, rolling about on the mud. The gentleman dismounted, and after a long chase succeeded in taking the bird; but its effort to escape was its last struggle; when taken up it was dead, and a cockle was found firmly grasping the bill, which was inserted between the valves in the same manner as in the case of the Tern. From the evidently exhausted state of the bird, it is probable that it had been struggling for

some considerable time with its diminutive and pertinacious antagonist.

27. Lesser Tern. S. minuta, *Linnæus.*

Sterna minuta, Bewick, Hist. Brit. Birds, Ed. 1847, II., 186.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 519.

In 1832 we took the eggs of this species on the mainland near Holy Island; they were deposited on the bare gravelly beach, but were not easily detected, on account of their resemblance in colour to that of the material on which they rested. This interesting spring-and-autumn migrant no longer breeds in that locality, and I know of no other station for it on our coast. It is by no means a common species; not more than ten or a dozen pairs were located at the breeding station above mentioned.

140. HYDROCHELIDON, *Boie.*

28. Black Tern. H. fissipes, (*Linnæus.*)

Sterna nigra, Bewick, Hist. Brit. Birds, Ed. 1847, II., 184.

,, *fissipes*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 523.

A casual visitant. There are three examples of this species in my collection. One in the first plumage was killed at Prestwick Car in 1831, and two adult examples, both taken in that locality in November, 1845.

I learn from Mr. Duncan that a specimen was killed near Morpeth on the 20th of September, 1858.

I once saw three Black Terns on the wing at Prestwick Car; they came so near to me that I could make out that two of them were immature, and one adult.

29. White-winged Black Tern. H. nigra, (*Linnæus.*)

Sterna leucoptera, Yarrell, Hist. Brit. Birds, Ed. 2, III., 527.

Hydrochelidon leucoptera, Gould, Birds of Gt. Britain, Part XIV.

This is a rare casual visitant, only a single example having been taken in the district. This I obtained from the collection of Mr. Oxley, of Redcar, April, 1871. It is a very fine adult

bird, and was shot on the 15th of May (year unknown), at Port Clarence, Tees mouth.

Family. ANATIDÆ, *Leach.*

141. CYGNUS, *Linnæus.*

30. Wild Swan or Whooper. C. ferus, *Ray.*

Cygnus ferus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 268.

,, ,, Yarrell, Hist. Brit. Birds, Ed. III., 187.

A rather common winter visitant. Prestwick Car was a great resort of this species, which was seen there every winter. It also frequently visited Fenham Flats, where Edmond Crawshay, Esq., has shot several.

In the winter of 1871 three of these noble birds joined the mute Swans on Gosforth Lake. A hole having been made in the ice for their accommodation they all fed together, and the strangers became remarkably tame; they were at length captured and pinioned. In the spring all three disappeared; they had wandered, probably obeying the impulse to migrate, and two of them may have fallen a prey to the fox, as only one returned, and is still on the lake.

30. Bewick's Swan. C. minor, (*Pallas.*)

Cygnus Bewickii, Bewick, Hist. Brit. Birds, Ed. 1847, II., 273.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 194.

A winter visitant, and quite as common as the Whooper.

It is rather surprising that Bewick's Swan was not recognized as a British species till 1829. In January of that year I purchased an example of it in a fruiterer's shop in Newcastle; it was shot out of a flock of about forty, at Prestwick Car, a day or two before. I at once perceived its specific distinctness from the common species, having carefully examined both its external and internal characters; it was a male. On the 7th of February following, another example was killed at Haydon Bridge, and was sent to the Newcastle Museum. This specimen I also

examined, and found it corresponded exactly in every respect to my own. On dissection this second example proved to be a female, but the other internal characters were found to be similar to those of my specimen. These two Swans I believe were the first fully recognized individuals of this species in England. The Haydon Bridge example went into the hands of the late Mr. R. R. Wingate, to stuff for the Newcastle Museum, and is still preserved there. My specimen I prepared myself, and it has ever since formed part of my collection. A notice of the supposed new Swan was drawn up by the late Mr. R. R. Wingate, and read on the 20th of October, 1829, at a meeting of the "Natural History Society of Northumberland, Durham, and Newcastle-upon-Tyne," and was published the following year in the Transactions of that Society, Vol. I., p. 1; but by some unaccountable inadvertency my specimen was not alluded to.

Mr. Yarrell read at the meeting of the Linnæan Society, on the 19th of February, 1830, a description of the supposed new species, which was afterwards published in the Transactions of that Society, Vol. XVI., p. 445, 1833. It appears that that gentleman had previously (24th of November, 1829) given some account of the distinguishing characters of Bewick's Swan to the Zoological Club of the Linnæan Society.

In November, 1829, seven specimens of the bird were killed by right and left shot, upon Sweethope Lough, by the gamekeeper of the late Sir John Trevelyan, Bart., of Wallington. In February, 1837, five specimens of this Swan were shot out of a flock of eleven, upon a large fish pond, at Blagdon, by the gamekeeper of the late Sir Matthew White Ridley, Bart.; two of these are preserved in my collection.

The Polish Swan (*Cygnus immutabilis*) is mentioned as having occurred at Hartlepool, on the authority of Mr. J. H. Gurney, Jun., in Harting's "Handbook of British Birds," p. 154. I am informed, however, by Mr. Gurney himself, that the authority of this notice rests only on a newspaper paragraph. I therefore do not venture to include it in this catalogue.

142. ANSER, *Barrère.*

31. Grey Lag Goose. A. cinereus, *Meyer.*

Anser ferus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 236.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 140.

A casual visitant. This Goose occasionally occurs in winter, singly, or in twos or threes, but never in large flocks. It does not appear with sufficient regularity to entitle it to rank as an annual visitant. I have three or four specimens, all killed at Prestwick Car. Two of them when shot were associated with the domestic Goose, great numbers of which were reared at that place. It sometimes visits the Lake at Gosforth; I saw one there in April, 1856.

We took the eggs of this species in Norway, in 1833. And while on a tour in Sutherlandshire, with the late Mr. Charles St. John, we saw several of its nests on an island in Loch Leoil; the eggs had all been removed a few days before we visited this spot. We, however, saw the birds (six or seven pairs), which left the island on our approach, and flew to the mainland; they had evidently commenced to reconstruct their nests, which had been well formed, and considerably raised above the ground; they were composed of grass and lichen.

There can be no doubt that the Grey Lag is the progenitor of the domestic Goose, some of which are so like the wild specimens as not to be distinguishable; and many of the old ganders have a few straggling black feathers between the legs, exactly similar to those seen in a wild state. This relationship seems to be recognized by the Grey Lag itself, for it is very much inclined to join and feed with the domestic Goose. I have known this to occur several times besides that mentioned above.

I possess four eggs and the inner portion of a nest, which were taken on an island in Loch Marce, Rosshire, by Mr. H. J. Elwes, to whom I am indebted for the specimens.

32. Bean Goose. A. sylvestris, *Brisson.*

Anser segetum, Bewick, Hist. Brit. Birds, Ed. 1847, II., 245.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 148.

The Bean Goose is an autumn and winter visitant; usually seen in considerable flocks, flying in lines. Berwick Hill, in the neighbourhood of Prestwick Car, was a favourite haunt of this species; and I understand it is still seen occasionally there feeding in the stubbles.

It has been asserted that the Bean Goose breeds in Sutherlandshire; and such was the opinion of the late Mr. Charles St. John, until our visit to that part of Scotland, in 1849, when it became evident that the supposed Bean Goose was really the Grey Lag. We saw no trace of the former on any of the loughs that we visited. We found that the Geese had been much reduced in numbers since the time of Mr. Selby's tour to Sutherlandshire, and that they had ceased to breed in one or two stations he mentioned; but as the late Duke of Sutherland was desirous these birds should be preserved, it is not unlikely that they may have again increased in number.

33. Pink-footed Goose. A. brachyrhynchus, *Baillon.*

Anser brachyrhynchus, Yarrell, Hist. Brit. Birds, Ed. 2, III., 153.

,, ,, Gould, Birds of Gt. Britain, Part XIX.

Not an uncommon autumn and winter visitant.

34. White-fronted Goose. A. albifrons, *Bechstein.*

Anser albifrons, Bewick, Hist. Brit. Birds, Ed. 1847, II., 249.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 157.

This species is an autumn and winter visitant. Two examples in my possession were shot at Prestwick Car, in 1845; one in May, the other in October. Edmond Crawshay, Esq., has killed several at Fenham Flats.

143. BERNICLA, *Stephens.*

35. Bernicle Goose. B. leucopsis, (*Bechstein.*)

Anser leucopsis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 251.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 161.

An autumn and winter visitant; not by any means so abundant on our coast as it is on the western shores of the island. In November, 1866, there were six examples killed on Fenham Flats, Holy Island.

36. Brent Goose. B. brenta, (*Brisson.*)

Anser Bernicla, Bewick, Hist. Brit. Birds, Ed. 1847, II., 254.

,, *torquatus*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 164.

A common autumn and winter visitant. Great numbers of it are occasionally shot at Fenham Flats.

37. Red-breasted Goose. B. ruficollis, (*Pallas.*)

Anser ruficollis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 256.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 170.

An exceedingly rare casual visitant.

The following is a quotation from Harting's "Handbook," p. 156:—

"One near Berwick-upon-Tweed, 1818. Fleming, Hist. Brit. An., p. 128."

"Two seen on the Tees, Durham, of late (1845). Hogg, Cat. Birds S.E. Durham."

Having written to Mr. Harting asking for information respecting these entries in the Handbook, I received the following extract from page 31 of Mr. Hogg's work, entitled "Catalogue of Birds observed in South Eastern Durham, and in North Western Cleveland, by John Hogg (from the 'Zoologist') London: Newman. 1845."

Red-breasted Bernicle.

Bernicla ruficollis.

"Two of these very scarce and handsome species have been

seen of late years by the Tees. One was shot by Mr. J. Hikely, in Cowpen Marsh, and afterwards stuffed."

The specimen in the Newcastle Museum "was shot in the severe frost in the beginning of the year 1776, near London."—Fox's Synopsis of the Newcastle Museum, p. 96; where it is also stated that "one was taken alive in this neighbourhood, and is still living. (P.S. Was the property of a lady lately deceased.) It is kept in a pond with some Ducks of the wild breed, with whom it is very sociable, but never produce together, though there is one it particularly associates with, and seems to be partial to. It is very tame and familiar. This is, I think, the most beautiful of the *Anas* genus."—Tunstall, MS.

38. Canada Goose. B. Canadensis, (*Willughby.*)

Anser Canadensis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 258.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 181.

A casual visitant. The Cravat, or Canadian Goose, has occurred two or three times in the district; but whether they are escaped birds or not it is impossible to say, though there is nothing apparently to prevent a powerful aquatic bird like this from crossing the Atlantic.

In 1830, a specimen in the Newcastle Museum was shot, out of a flock of six, at Bywell, on the Tyne. Another example, in my collection, was killed at Prestwick Car, in June, 1836. It is an adult bird, and the plumage is in excellent condition. Nevertheless, it would appear that this was an escaped bird; for, on careful examination, a piece of string was found tightly encircling the leg above the true heel.

In Mr. Selby's catalogue the following passage occurs: "In June, 1816, a flock of ten or twelve of these birds for some time haunted the fields around Bamborough. They were very wary and wild, and the only specimen killed out of the number is now in my possession. They had probably escaped from the grounds of some gentleman. I have ascertained from those who have been in the habit of keeping them in their ponds, that they are very apt to fly and stray away."

144. CHENALOPEX, *Stephens.*

39. Egyptian Goose. C. Ægyptiaca, (*Linnæus.*)

Anser Ægyptiacus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 262.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 173.

A place is given to this bird in the catalogue, as it is considered by several ornithologists to be an irregular visitant to this country, and as it has been shot at the Farne Islands; but I am much inclined to think that all the specimens killed have been escaped birds.

145. TADORNA, *Fleming.*

40. Shieldrake. T. Belonii, *Ray.*

Anas Tadorna, Bewick, Hist. Brit. Birds, Ed. 1847, II., 281.

Tadorna vulpanser, Yarrell, Hist. Brit. Birds, Ed. 2, III., 235.

A resident, but not by any means common. It breeds in rabbit holes on the sandy links by the sea shore between Holy Island and Bamborough.

It occasionally appears in large flocks in the autumn. I saw on the beach near Newbiggin-by-the-Sea, in October, 1871, a flock of forty or fifty: they were chiefly immature.

146. SPATULA, *Boie.*

41. Shoveller. S. clypeata, (*Linnæus.*)

Anas clypeata, Bewick, Hist. Brit. Birds, Ed. 1847, II., 316.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 242.

A spring-and-autumn migrant, but rather rare. This species bred regularly at Prestwick Car. Two or three pairs bred there in 1855; nests were also taken in 1853 and 1856; and previously to these dates I had taken its eggs there. It bred once at Grindon Lough, Northumberland, and a bird was shot there on the 12th of May, 1830. I am inclined to believe that it has likewise bred at Gosforth Lake, where I saw three pairs at the

end of April, 1856; they were paired at that time. These had probably been driven from Prestwick Car by the draining operations that were then going on. A specimen, a mature female, was shot on the Newcastle Town Moor, on the 2nd of August, 1873, by Mr. Robert Duncan, Jun.

On the 17th of May, 1873, I took a nest of eleven eggs of this species at Loch Spynie, near Elgin. Several other nests have been taken there, both before and since that date. This Duck seems to have been as regular a breeder in that locality as it was at Prestwick Car; unfortunately, these two breeding stations no longer exist, both having been drained.

The late Mr. Charles St. John, who was desirous of obtaining the Shoveller for domestication, made the attempt by setting eggs, taken at Spynie in 1850 and 1851, under the common fowl. In both instances the young were hatched, but lived only a few days. Mr. St. John kindly sent me specimens of these downy Ducklings. The crown of the head and all the upper parts are of a dark dusky brown; immediately above the thighs there is an indistinct pale spot at each side; the cheeks and forehead are yellowish, with a dusky streak in the centre of the latter, and a similar streak passes in front of and behind the eye; a small spot of the same colour marks the position of the ear; all the under parts are obscure white. The bill is a very good miniature representation of that of the adult, but is a little less expanded laterally at the tip. It is stated in Yarrell's "History of British Birds" that the bill at this stage does not at all exhibit the peculiar characteristic of the adult: there is surely some mistake in this observation.

147. ANAS, *Linnæus.*

42. Mallard, or Wild Duck. A. boschas, *Linnæus.*

Anas boschas, Bewick, Hist. Brit. Birds, Ed. 1847, II., 288.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 264.

A common resident. It bred regularly at Prestwick Car; and its nest is to be found wherever there is a suitable locality in the wilder districts of the two counties.

Old females of the domestic Duck, which is derived from the Mallard, not unfrequently assume the plumage of the Drake. A fine example of this phenomenon occurred at Cramlington, in 1858. The individual was fifteen or sixteen years old when she was killed and came into my possession. For twelve years of her life she was in the plumage of her sex, and reared several broods. After the commencement of the change in plumage her eggs became small, and she never afterwards showed any disposition to sit on them; but her voice remained unchanged. I gave a description of this bird in the Transactions of the Tyneside Club, Vol. IV., p. 58.

Another example of this peculiar change of plumage happened at Ravensworth, a few years ago. In this instance the subject was a true wild Duck, many of which were kept in a semi-domestic state on a pond near the castle. I stuffed the specimen for Lord Ravensworth, and it is now in his lordship's museum, and is a very beautiful and perfect example.

148. CHAULELASMUS, *G. R. Grey.*

43. Gadwall. C. strepera, (*Linnæus.*)

Anas strepera, Bewick, Hist. Brit. Birds, Ed. 1847, II., 300.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 249.

Only two examples of this casual visitant have occurred. One was shot at Prestwick Car, 28th of November, 1850, by Mr. C. M. Adamson; it was accompanied by another individual. Edmond Crawshay, Esq., informs me of a male specimen which was killed at Fenham Flats in January, 1860.

149. MARECA, *Stephens.*

44. Wigeon. M. Penelope, (*Linnæus.*)

Anas Penelope, Bewick, Hist. Brit. Birds, Ed. 1847, II., 305.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 286.

A plentiful autumn and winter visitant, but it never breeds in the district. Mr. Charles St. John and I took a nest with

seven eggs at Loch Naver, near Altnaharrow, Sutherlandshire, on the 21st of May, 1849, amidst heather on the banks of the loch. I have another nest taken in May, 1866, by my friend Mr. W. E. Brooks, near Loch Meadie, Sutherlandshire, to whom I am indebted for the specimen and four of the eight eggs which it contained.

Hybrids of the Wigeon are not uncommon; the Bimaculated Duck of Bewick and Yarrell is a hybrid between this species and the Teal. Of this there can be no doubt, for I have seen the specimen figured by these two authors, and this opinion is now I believe generally admitted. A hybrid between the Wigeon and Pintail is in my collection. This specimen partakes about equally of the characters of both parents; it has the markings of the breast and some of the buff colour of the head of the Wigeon; the chestnut of the head and neck is mingled with the glossy green of those parts of the Pintail, and the back of the neck is very dark as in the Wigeon. The wing coverts are of a soiled white; the scapulars, tertiaries, and tail-feathers resemble mostly those of the Pintail; but the two long central caudal feathers are not quite so much produced as in the Pintail.

In 1860 the late Mr. A. Savage, gamekeeper at Hornby, sent me a pair of hybrids between the male Wigeon and female wild Duck. They are a little larger than the Wigeon. The head of the male is brown, the crown glossy green; the neck is likewise brown, a little darker below, above glossy green, with the sides strongly freckled with dark brown; the back strongly resembles that of the Wigeon; the under parts are similar to those of the Mallard; the central feathers of the tail are a little elongated, as in the Wigeon, but, like those of the Mallard, are slightly turned up. I received another pair of hybrids at the same time from Mr. Savage: they were the offspring of a male Wigeon and the Call Duck. They closely resembled the first-mentioned pair. All the four birds were alive, and I presented them to my friend the late Mr. William Wylam, of the North Leam. One of the females laid eleven eggs, the usual number, and sat upon them a month, but no young were produced. One of the males is still alive.

150. DAFILA, *Leach.*

45. Pintail. D. acuta, (*Linnæus.*)

Anas acuta, Bewick, Hist. Brit. Birds, Ed. 1847, II., 302.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 253.

A rare resident. An adult male in my possession was shot in the neighbourhood of Newcastle, March, 1826; and a female killed at Prestwick, January, 1838, is likewise in my collection. I saw a pair, male and female, at Gosforth Lake, on the 31st of March, 1865. There can be little doubt that this species occasionally bred at Prestwick Car. Many years ago a female was shot there during the breeding season. I have the specimen, and it has all the appearance of a bird having bred in the year in which it was shot.

Five or six specimens were killed at Fenham Flats, Holy Island, in the winter of 1856–57, as I am informed by Edmond Crawshay, Esq.

151. QUERQUEDULA, *Stephens.*

46. Garganey. Q. circia, (*Linnæus.*)

Anas querquedula, Bewick, Hist. Brit. Birds, Ed. 1847, II., 311.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 277.

The Garganey is a rare, casual visitant. I suspect, however, that it occasionally bred at Prestwick Car. A female in my collection was killed there in June, 1833, in complete summer plumage; and on the 14th of June, 1855, two, a male and female, were shot at the same place. On the 6th of April, 1858, I saw three specimens, a female and two males, at Gosforth Lake.

47. Teal. Q. crecca, (*Linnæus.*)

Anas crecca, Bewick, Hist. Brit. Birds, Ed. 1847, II. 313.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 281.

The Teal is a resident with us. It bred every year at Prestwick Car, where it was common. It also breeds at Crag Lough, Northumberland, and in other wild parts of the district. During

autumn and winter it appears in large flocks on the sea coast, when, no doubt, its numbers are greatly augmented by migrants from the north, as is the case also with the Mallard.

152. BRANTA, *Boie.*

48. Red-crested Duck. B. rufina, (*Pallas.*)

Fuligula rufina, Yarrell, Hist. Brit. Birds, Ed. 2, III., 327.

Branta ,, Gould, Birds of Great Britain, Part XI.

A casual visitant. A female of this rare Duck was shot at Fenham Flats, in November, 1857, and is now in the collection of Edmond Crawshay, Esq. This is the only specimen known to me that has occurred in the district.

153. FULIGULA, *Stephens.*

49. Tufted Duck. F. cristata, (*Linnæus.*)

Anas fuligula, Bewick, Hist. Brit. Birds, Ed. 1847, II., 339.

Fuligula cristata, Yarrell, Hist. Brit. Birds, Ed. 2, III., 351.

This resident species is not uncommon in winter. It has bred three times at Wallington. In 1858, Sir W. C. Trevelyan, Bart., informed me that a small Duck had been seen with a brood of eight or nine young that year, on a small pond, near the house, at Wallington, but he was not able to determine the species. In the following year, Sir W. C. Trevelyan wrote to inform me that the Duck had again appeared at Wallington. At his invitation I visited the spot on the 24th of May, and by the aid of a glass saw both parent birds; and I distinctly made out that they were Tufted Ducks, male and female. I remained a day or two, but searched in vain for the nest. On the 21st of June, Sir Walter wrote to me as follows:—"I will, to-morrow, send you by carrier an egg of the Tufted Duck, whose nest we have at last found, with nine eggs in it; it is amongst sedges and willows, made of sedges and a slight lining of down."

"The male disappeared about a fortnight ago, and left his mate to bring up her family alone, as she did last year, when he

was never seen; and I hope that she will succeed as well this season, and that we may look for more of the family to herd with us another year."

I was at Wallington, on the 17th of May, 1860, and saw one male and two female Tufted Ducks on the same small pond at which they bred last year. We could not find the nest. They have not been observed at Wallington since this date; but as there are many ponds in the neighbourhood, and as the birds are very difficult to see, they might readily escape observation.

I have seen Tufted Ducks several times at Gosforth Lake, in March and April.

50. Scaup. F. marila, (*Linnæus.*)

Anas marila, Bewick, Hist. Brit. Birds, Ed. 1847, II., 332.

Fuligula ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 341.

A winter visitant, abundant, in severe winters, on the coast. This species is occasionally seen inland. A male specimen which came into my possession was killed at Sweethope Lough, August, 1840. The upper parts were almost completely in the winter plumage; the feathers of the under parts and tail were much worn.

51. Pochard. F. ferina, (*Linnæus.*)

Anas ferina, Bewick, Hist. Brit. Birds, Ed. 1847, II., 334.

Fuligula ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 332.

A not uncommon winter visitant, though I have reason for believing that it occasionally breeds in the district. I have seen a specimen on Capheaton Lake in the middle of the breeding season, and from its movements was led to believe that it had a nest there. I have likewise seen Pochards more than once on Gosforth Lake, in March and April.

I am indebted to the late Mr. Bean, of Scarborough, for an egg of this species. It was one of a nest taken at the Mere, at Scarborough, June, 1844, by that gentleman, who shot the bird from the nest.

The Pochard differs from the celebrated Canvas-back Duck of America in no important character excepting that of size, the latter being considerably the larger.

52. White-eyed Pochard. F. nyroca, (*Guldenstein.*)

Anas leucophthalmos, Bewick, Hist. Brit. Birds, Ed. 1847, II., 337.

Fuligula nyroca, Yarrell, Hist. Brit. Birds, Ed. 2, III., 337.

A rare casual visitant. Mr. Selby, in his catalogue, says, "The individual from which the figure in the 'Illustrations of British Ornithology' was taken, was killed on the river Tyne, in the neighbourhood of Hexham." This is, I think, the only example that has been known to occur in the district.

154. CLANGULA, *Fleming.*

53. Golden-eye. C. glaucion, (*Linnæus.*)

Anas clangula, Bewick, Hist. Brit. Birds, Ed. 1847, II., 343.

Fuligula ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 368.

A common winter visitant. Adult birds are much less frequent than the immature. We obtained a nest of this species in Norway, in 1833; it contained five eggs. We did not take it ourselves; it had been found, a few days before we arrived, at Romstadt, in Overhalden. Here the eggs were shown to us; and on making enquiry we ascertained that the nest was in a hole in a tree at no great distance from where we then were; so being anxious to determine the species we went to the spot, and found that the hole was in an aspen tree, and had been the nesting place the previous year of a Woodpecker; the tree stood close by a considerable stream. The entrance of the hole was just wide enough to admit my hand, and was about fifteen feet from the ground; it was sixteen inches deep, and widened considerably downwards. The nest was composed of straw, and feathers of the Golden-eye. And thus we obtained the first information as to the nesting habits of this species. The boy who had found the nest, and was our guide, was now particularly

questioned. He caught the bird on the nest. Where was it? They had eaten it. The feathers, where were they? At the house. On our return, we procured the feathers, and the wings which had been kept for dusters; and thus the question was solved beyond a doubt. Our eggs were those of the Golden-eye, and great was our joy, as no eggs of this species had been seen in England at that time. Since then I have received specimens of the eggs from the late Mr. Wheelwright, who took them in Sweden.

155. HARELDA, *Leach.*

54. Long-tailed Duck. H. glacialis, (*Linnæus.*)

Anas glacialis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 345.
Fuligula ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 355.

A winter visitant. Not uncommon on the coast.

156. SOMATERIA, *Leach.*

55. Eider Duck. S. mollissima, (*Linnæus.*)

Anas mollissima, Bewick, Hist. Brit. Birds, Ed. 1847, II., 319.
Somateria ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 297.

A resident, but not by any means abundant. Several pairs breed on the Farne Islands.

56. King Duck. S. spectabilis, (*Linnæus.*)

Anas spectabilis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 324.
Somateria ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 308.

This handsome Duck which must rank as a rare casual visitant, has occurred only once on the coast of Northumberland, and that so late as November 14th, 1873. It was shot near the Farne Islands, and is now in the possession of F. Raine, Esq., of Durham. I saw the specimen a few days after its capture, in the hands of Mr. R. Duncan, to whom it was intrusted to be preserved. It is a fine mature male, in full plumage, with the exception of the neck, on which part it shows a little grey of the summer plumage.

It appears, from two letters I received some time ago, that this King Duck, or another, must have been in the neighbourhood of the Farnes during the summer. The first letter was from the Rev. Charles Thorp, on the 2nd of June, who says, "I was at the Fern Islands yesterday. The boatmen told me that a bird not known to them had been seen and named by a Leeds gentleman some weeks ago. They described the bird as an Eider Drake, with red bill."

The second letter was from Mr. James Sutton, October 1st, 1873. He says that "a male and female King Eider were seen at the Ferns this summer." There can, I think, be little doubt that the bird lately shot was one of the birds seen; but it is extraordinary that this species should have remained on our coast during the summer. I am not aware that it has ever been seen before so far south as Iceland during the breeding season.

One is mentioned in Harting's "Handbook" as having been killed at Bedlington, Northumberland, on the authority of Mr. Duff, "Zoologist," 1851, p. 3036; but from a letter, dated April 16th, 1873, which I received from Mr. Duff, I find that the bird so recorded was shot at Bridlington Quay, Yorkshire.

157. OIDEMIA, *Fleming.*

57. Scoter. O. nigra, (*Linnæus.*)

Anas nigra, Bewick, Hist. Brit. Birds, Ed., 1847, II., 329.

Oidemia ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 317.

A winter visitant. Not uncommon.

58. Velvet Duck. O. fusca, (*Linnæus.*)

Anas fusca, Bewick, Hist. Brit. Birds, Ed. 1847, II., 327.

Oidemia ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 312.

A winter visitant; but not so common as the preceding species.

158. MERGUS, *Linnæus.*

59. Goosander. M. merganser, *Linnæus.*

Mergus merganser, Bewick, Hist. Brit. Birds, Ed. 1847, II., 349, 352.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 395.

An occasional winter visitant; occurring as frequently on inland waters as on the sea coast.

60. Red-breasted Merganser. M. serrator, *Linnæus.*

Mergus serrator, Bewick, Hist. Brit. Birds, Ed. 1847, II., 354.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 389.

A winter visitant. Like the preceding species it is occasionally captured in our estuaries and rivers during severe weather; it is also taken on the coast.

61. Smew. M. albellus, *Linnæus.*

Mergus Albellus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 356, 358.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 378.

This winter visitant is much rarer than its two congeners.

It has frequently been killed on the Tyne. A few years ago, two specimens, in the mature white plumage, were shot on the river Wear, near Durham.

Family. PODICIPIDÆ, *de Sélys-Longchamps.*

159. PODICEPS, *Latham.*

62. Great Crested Grebe. P. cristatus, (*Linnæus.*)

Podiceps cristatus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 164, 166.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 400.

A winter visitant; rare. A specimen, in complete summer plumage, in my collection, was shot in Easter week, 1860, at the mouth of the Tyne. Several other individuals have occurred in the district; but they are all immature, or in winter dress.

63. Red-necked Grebe. P. grisegena, (*Boddaert.*)

Podiceps rubricollis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 167.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 407.

A winter visitant, which only appears in very severe weather. In 1830, several were killed in the neighbourhood of Newcastle, in the first and winter plumage. On the 8th of October, 1851, Mr. C. M. Adamson, shot a specimen at Holy Island, in mature plumage, with a few red feathers on the neck and breast.

A specimen in my collection, in summer plumage, was found alive a few years ago on Cullercoats Sands.

64. Sclavonian Grebe. P. auritus, (*Linnæus.*)

Podiceps cornutus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 169, 171.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 411.

A not uncommon winter visitant. A specimen, in my collection, in full summer dress, was shot off Cullercoats, 26th of April, 1830. This is the only individual I have met with in the district in the summer dress.

65. Eared Grebe. P. nigricollis, *Sundevall.*

Podiceps auritus, Yarrell, Hist. Brit. Birds, Ed. 2, III., 417.

,, *nigricollis*, Gould, Birds of Gt. Britain, Part III.

A very rare winter visitant. I have three or four specimens that were killed in the district, all either immature or in winter plumage.

A specimen, in the possession of Mr. C. M. Adamson, which that gentleman shot at Holy Island, in March, a few years ago, has attained a few of the red summer feathers on the neck.

66. Little Grebe. P. fluviatilis, (*Brisson.*)

Podiceps minor, Bewick, Hist. Brit. Birds, Ed. 1847, II., 173.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 420.

A resident. Most common in winter, but met with throughout

the year. It bred regularly on the Tees, near Stockton, whence I have received several nests and eggs.

I once met with it, in the summer plumage, on the 30th of March, in Northumberland, where, there can be little doubt, it occasionally breeds. I am obliged to Mr. Isaac Clark for the information that its nest of five eggs was taken in a pond, at Featherstone Castle, in 1871.

Family. COLYMBIDÆ, *Leach.*

160. COLYMBUS, *Linnæus.*

67. Great Northern Diver. C. glacialis, *Linnæus.*

Colymbus glacialis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 379.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 425.

A winter visitant; somewhat rare. It is occasionally seen, in the district, in the early part of summer. I have a specimen that was shot on the Northumberland coast, on the 22nd of May, 1839.

I saw a mature specimen shot on the Tyne, close to the Bridge, on the 12th of October, 1824. The occurrence of this bird is mentioned in "Sykes' Local Records."

68. Black-throated Diver. C. arcticus, *Linnæus.*

Colymbus arcticus, Bewick, Hist. Brit. Birds, Ed. 1847, II., 381, 383.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 434.

A frequent winter visitant. A specimen, in my collection, in complete summer dress, was shot some years ago on the river Wear, near Durham.

69. Red-throated Diver. septentrionalis, *Linnæus.*

Colymbus septentrionalis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 385, 387.

,, *septentrionalis*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 441.

A common winter visitant, which arrives so early that it is

not difficult to obtain specimens in the summer dress, and which remains so long that they are frequently found in their nuptial plumage before they leave our sea coast.

We found this species breeding in Norway, in 1833. The nest, if it can be so called, is a mere depression in the soil, where the eggs, usually two, are placed, near the margin of a pond or lake. In one instance, where the young were hatched, a groove was worn in the soil from the nest depression, where the eggs had lain, to the water; evidently made by the old bird pushing its body along to and fro between the nest and the water. The Divers do not appear to have the power of walking, or even of standing with the body erect. I have frequently had them alive, but could never succeed in inducing them to balance themselves on their feet. They always rested on the breast, with the feet extended backwards; and owing to this peculiar position of the feet, and the consequent inability of the bird to walk, the eggs are always deposited close to the sides of the pools which they frequent.

FAMILY. ALCIDÆ, *Bonaparte.*

161. URIA, *Brisson.*

70. GUILLEMOT. U. TROILE, (*Linnæus.*)

Uria troile, Bewick, Hist. Brit. Birds, Ed. 1847, II., 390, 392.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2. III., 450.

A resident. Common on the shores of both counties. It breeds on the "Pinnacles," at the Farne Islands.

The Ringed Guillemot (*Uria ringvia* or *lacrymans*) is a variety of this species, and has frequently occurred in our district. I have three or four specimens of this variety, all captured on our sea coast.

It is stated in Harting's "Handbook," p. 167, that one or more specimens of Brünnich's Guillemot (*U. arra*) have been taken at the Farne Islands, but the reference given, "Zoologist," 1852, p. 3479, does not seem to bear out this assertion, and I am not aware of a single instance of its occurrence on the coast of the two counties.

71. Black Guillemot. U. grylle, (*Linnæus.*)

Uria grylle, Bewick, Hist. Brit. Birds, Ed. 1847, II., 394.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 462.

A winter visitant. Not unfrequent in severe weather.

162. MERGULUS, *Vieillot.*

72. Little Auk. M. alle, (*Linnæus.*)

Mergulus alle, Bewick, Hist. Brit. Birds, Ed. 1847, II., 396.

,, *melanoleucos*, Yarrell, Hist. Brit. Birds, Ed. 2, III., 465.

An irregular winter visitant, and certainly rare.

In November, 1841, this species visited our coast in great numbers. They moved in a northerly direction, and continued to pass in detached flocks for several days. In a few days I had sent to me twenty-six specimens. I visited the coast, and saw several flocks passing to the north.

Specimens are occasionally found lost and bewildered, allowing themselves to be taken by the hand, at a considerable distance from the coast, and some are not unfrequently picked up dead. The late Mr. John Laws of Breckney Hill, a pupil of Mr. Thomas Bewick, took one up alive in a turnip field in that locality, ten miles from the sea.

163. FRATERCULA, *Brisson.*

73. Puffin. F. arctica, (*Linnæus.*)

Mormon fratercula, Bewick, Hist. Brit. Birds, Ed. 1847, II., 398.

Fratercula arctica, Yarrell, Hist. Brit. Birds, Ed. 2, III., 469.

A resident; frequent on the coast all the year. It breeds on the Farne Islands. In the first week of June, 1831, in company with Mr. W. C. Hewitson and my brother Albany, we met with

it breeding there, but in no great numbers. I was informed by the late Mr. Joseph Watson, Jun., and Mr. Isaac Clark, who visited the islands in 1870, that there was then a colony of considerable size, and they saw great numbers of the birds swimming about in all directions.

164. ALCA, *Linnæus.*

74. Razor-bill. A. torda, *Linnæus.*

Alca torda, Bewick, Hist. Brit. Birds, Ed. 1847, II., 402, 404.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 473.

A resident; common on the coast the whole year. A few specimens breed occasionally at the Farne Islands. I have an egg that was taken there in 1838.

75. Great Auk. A. impennis, *Linnæus.*

Alca impennis, Bewick, Hist. Brit. Birds, Ed. 1847, II., 405.

,, ,, Yarrell, Hist. Brit. Birds, Ed. 2, III., 476.

A specimen of this interesting, and probably now extinct, bird (Plate XIII.) appears to have been taken on the Farne Islands, about a century ago. In Wallis's "History of Northumberland," it is stated, under the head Penguin, that "a curious and uncommon bird was taken alive a few years ago in the island of Farn, and presented to the late John William Bacon, Esq., of Etherstone, with whom it grew so tame and familiar, that it would follow him with its body erect to be fed."

There can be little doubt that this so-called Penguin was really the Great Auk. The only bird with which it might have been confounded is one or other of the Great Divers, the Northern or the Black-throated; but as neither of these can, I believe, walk, it could not be said that it followed Mr. Bacon "with its body erect to be fed;" while there can be no doubt that the Great Auk could move in this particular position, as the Razor Bill does.

The synonymy given by Wallis is as follows:—

"Anser magellanicus, Clus. exot., p. 101. Anser magellanicus s. Penguin, Worm. mus., p. 300., t. 301. Penguin nautis nostratibus dicta, Will. Orn., p. 242, t. 65. Penguin, Raj. Av., p. 118, n. 1. Leigh, Lancash. cum optima Icone. *Alca rostri sulcis octo; macula alba ante oculum*, Linn. Faun. Suec., p. 43, n. 119."

In the synonymy above, the passage "*Alca rostri sulcis octo; macula alba ante oculum*, Linn. Faun. Suec., p. 43, n. 119," is very satisfactory.

It would seem that this recorded Northumberland example has hitherto been overlooked.

LIST OF PLATES.

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APPENDIX.

Baillon's Crake. Porzana Baillonii, (*Vieillot.*)

Crex Baillonii, Yarrell, Hist. Brit. Birds, III., 106.

Porzana pygmæa, Gould, Birds of Great Britain, Part VI.

,, *Baillonii*, Degland et Gerbe, Ornith. Europ., II., 258.

Since the catalogue was printed I have obtained, through the kindness of my friend, Mr. Thomas Thompson, a specimen of Baillon's Crake, which was shot by the side of the Derwent, near Swalwell, on or about the 12th of July, 1874.

From the state of the plumage, and the time of year when it was shot, in all probability it was breeding in the neighbourhood, and must consequently rank as a spring-and-autumn migrant.

I believe this to be the first notice of the occurrence of this rare species in our district, but, from its skulking habits, it may hitherto have been unobserved.

In Vol. II., p. 145, Bewick mentions that a specimen of the Little Gallinule "was caught by the dogs of our friend, the late Major H. F. Gibson, in a boggy place covered with reeds and rushes, near the Tyne." It is not possible now to ascertain which species of Porzana is referred to in the above quotation, and in the absence of more recently recorded observations, the occurrence of the Little Gallinule in our district must remain doubtful.

ERRATA.

Page 1, line 4, for *Gmelin* read *Brisson*.

,, 19, ,, 27, ,, 39, ,, 49.

,, 24, ,, 12, ,, 288, ,, 282.

,, 51, ,, 11, ,, Streatham read Streatlam.

,, 56, ,, 13, ,, CINCHRAMUS read CYNCHRAMUS.

,, 57, ,, 18, ,, 48, ,, 49.

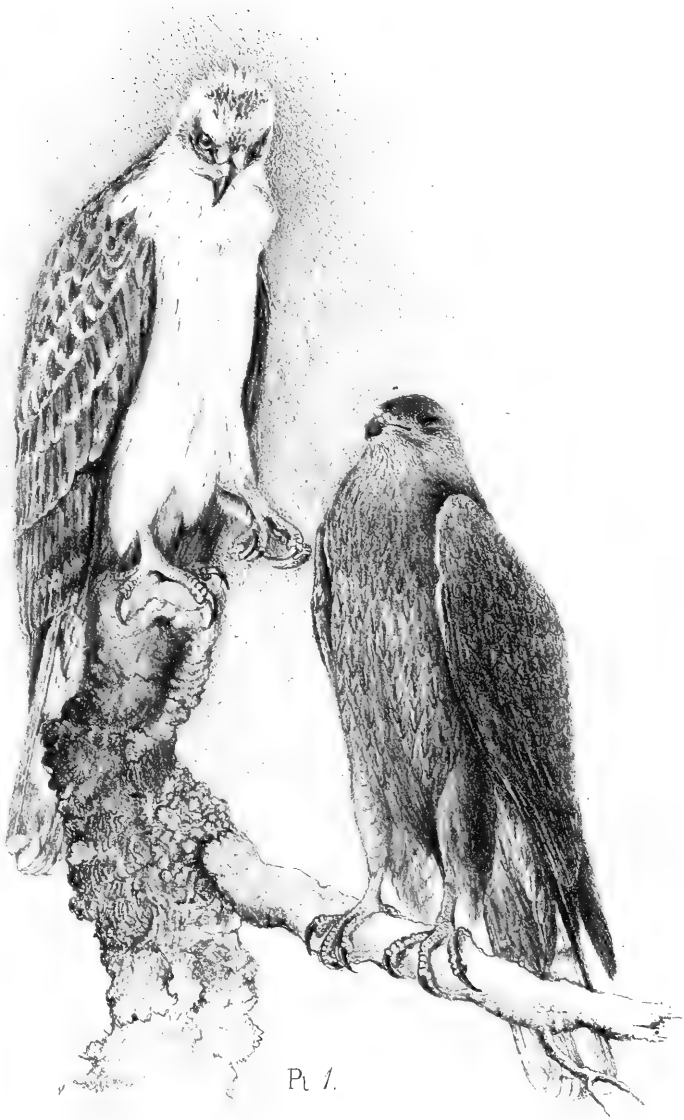
,, 84, ,, 18, ,, 83, ,, 283.

,, 97, ,, 5, ,, I. ,, II.

,, 98, ,, 2, ,, SIBERICUS, ,, SIBIRICUS.

,, 144, ,, 20, ,, 30, ,, 30 bis.

,, 167, ,, 13, ,, Plectrophanus, ,, Plectrophanes.



Pl 1.

John Hancock del.

HONEY BUZZARD. Pernis apivorus (Linn.)
Immature)

Nat. Hist. Trans. N & D. Vol VI

Pl. 2.

[illegible] Hawk [illegible] (Linn.).

Variety without bands on breast.

John Hancock del.

Pl. 4.

ROSE-COLOURED STARLING. *Pastor roseus.* (Linn.)

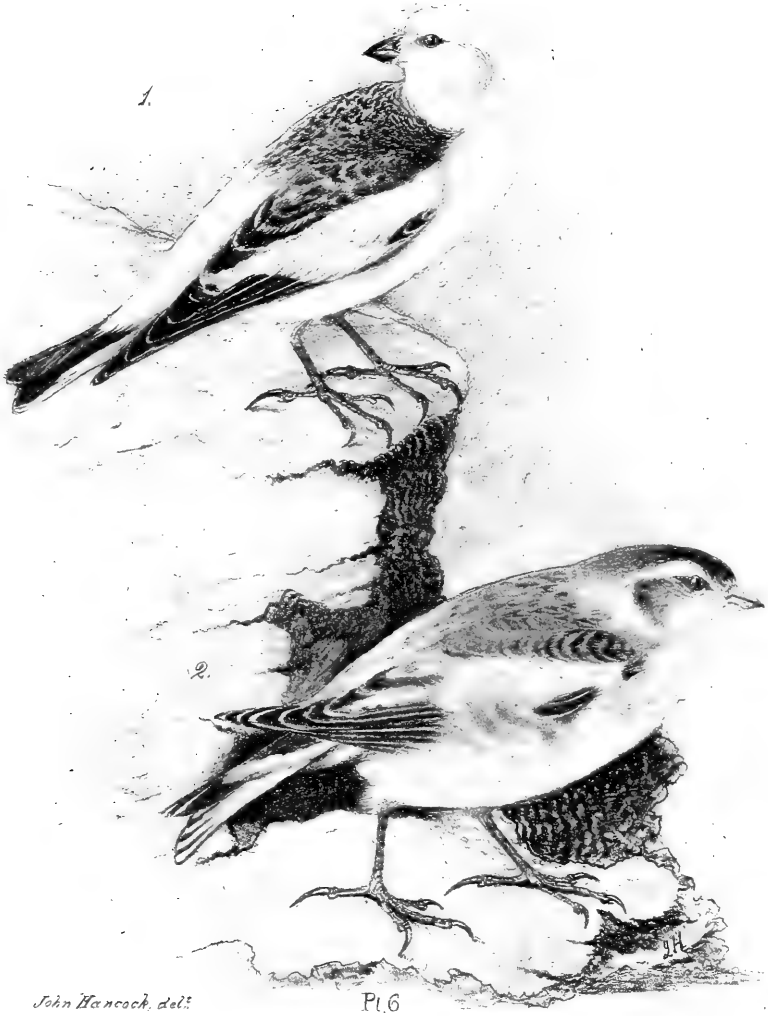
Fig. 1 Adult & after moulting. 2 & in breeding plumage.
3 Young after first moult.

Nat. Hist. Trans. N. & D. Vol. VI.

John Hancock del.

Pl 5.

ARCTIC REDPOLE, *Linaria canescens*, Gould.



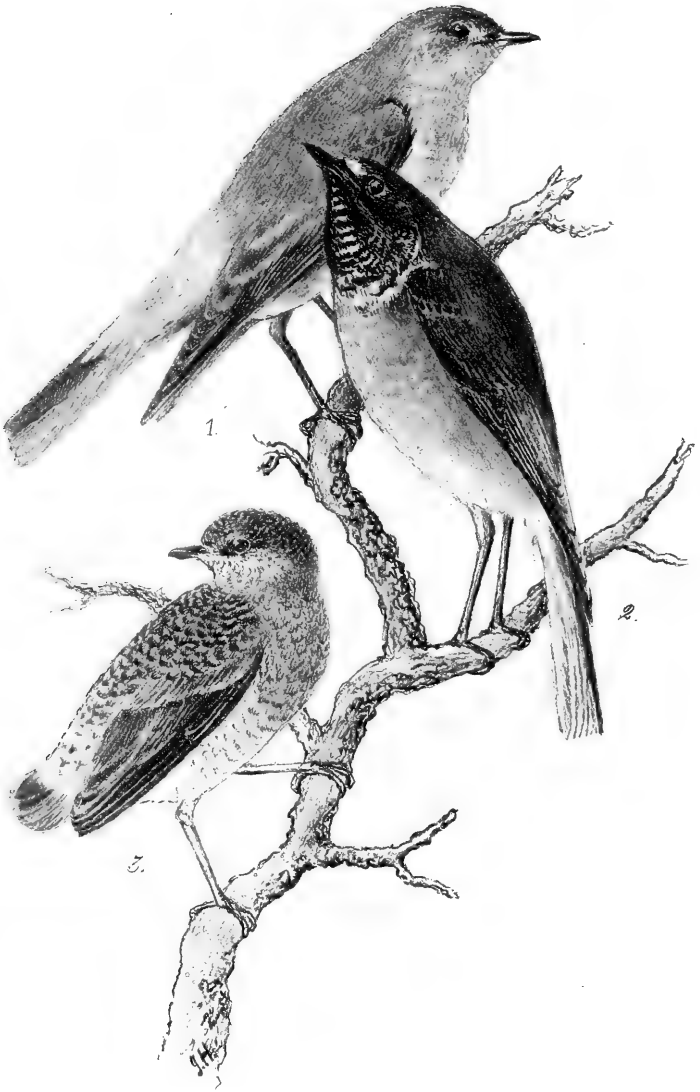
John Hancock, del.

Pl. 6

SNOWFLAKE, *Plectrophanes nivalis.* (Linn.)

fig. 1 Summer. 2 Winter.

Nat. Hist. Birds. Vol. II.



Pl 7.

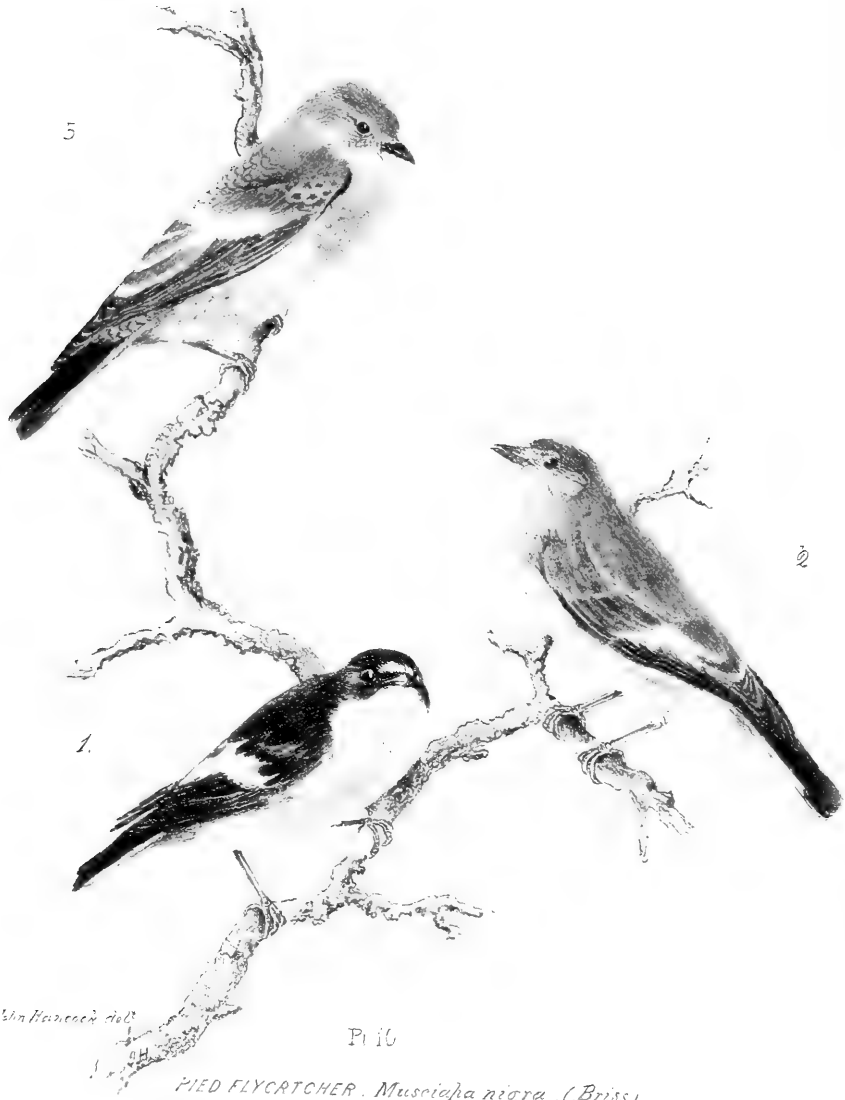
REDSTART. *Ruticilla phœnicura.* (Linn).
fig 1. adult ♂. 2 adult ♂ after Autumnal moult,
3 first Plumage.

Jean Verreaux del.et lith.

Pl. 9.

LONG-TAILED TITMOUSE, *Parus caudatus*, Linn.
Mesange à longue queue, Temm.

Nat. Hist. Trans. Ne. Vol. VI.



John Hancock del.

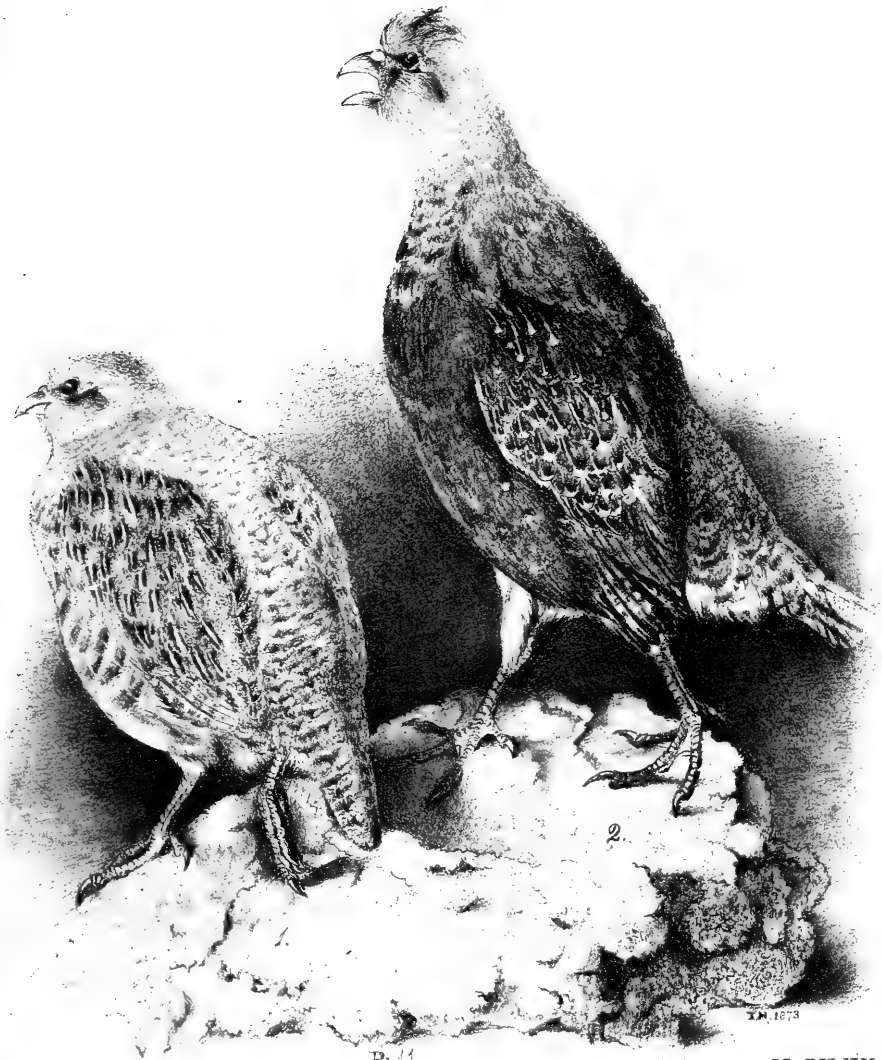
Pl 10

PIED FLYCATCHER. Muscicapa nigra. (Briss)

fig 1 ♂ Summer. 2 ♂ after Autumnal moult

3 Young first Plumage.

Nat. Hist. Trans. N & D Vol VI.

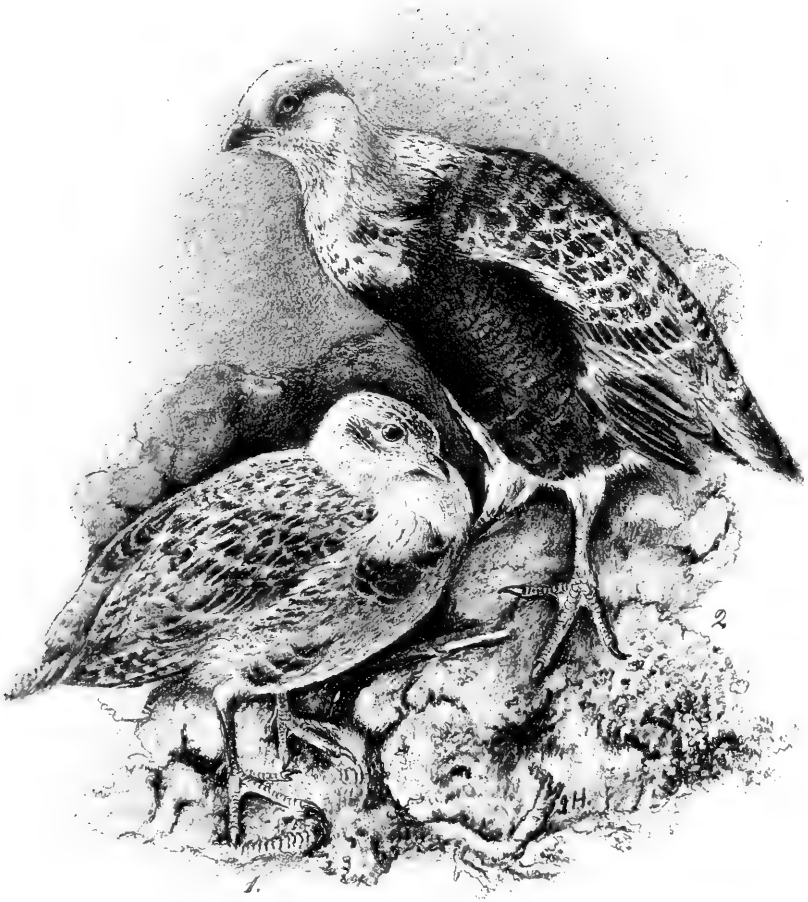


John Hancock del.

Pl. 11.

Nat. Hist. Trans. N. & D. Vol. VI.

PARTRIDGE, *Starna cinerea*, (Charleton)
fig. 1 ordinary, 2 Brown variety.



John Harcourt del.et lith. Pl 12. Nat. Hist. Trans. N. & D. Vol. VI

PARTRIDGE. Starna cinerea. Charleton.
fig 1 (Variety) young first Plumage.
2 do young changing.

John Hancock. del.

Pt 13

GREAT AUK. *Alca impennis*, *Linn*.

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